


noVus[®]

Professional solution for your CCTV systems



Product catalogue

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
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NOVUS®

Professional solution for your CCTV systems

Icon description

Cameras

-  Max. horizontal resolution
-  Day/Night function with a mechanical IR cut filter
-  Electronic Day/Night function
-  Digital Slow Shutter
-  Wide Dynamic Range
-  Easy installation and connection
-  Varifocal lens
-  3-axis camera module adjustment
-  Built-in LED illuminator
-  Degree of protection
-  Vandal proof housing
-  Built-in RS-485 port for remote control
-  Digital zoom
-  Optical zoom
-  On Screen Display
-  Digital Image Stabilization
-  Digital Noise Reduction
-  Built-in night sensor
-  Privacy zones
-  Presets
-  Patterns
-  Tours
-  Auto Scans
-  Number of alarm inputs/outputs

























Lenses

-  "Home" function
-  Continuous pan
-  Glass-made optics
-  Aspherical lenses
-  IR operation capability

Video capture cards & Digital video recorders

-  Operation mode
-  Max. recording speed
-  Max. recording resolution 720x288
-  Max. recording resolution 704x576
-  JPEG2000 compression
-  MPEG compression
-  M-JPEG compression
-  Software compression
-  Hardware compression
-  Real-time recording
-  CPU load
-  Number of recorded audio channels
-  Analogue spot output
-  Analogue spot output (with split screen feature)
-  PTZ camera control
-  Built-in CD-RW drive
-  Built-in USB
-  Built-in SCSI port for external HDDs connection
-  Number of spot monitors

Keyboards

-  VGA output
-  Control via PC mouse
-  Keyboard control via RS-485 port
-  IR remote control in-set included
-  Pre-alarm
-  Archive function
-  Mirroring - automatic backup onto internal HDDs
-  Object detection function
-  Event notification
-  Network operation
-  Simultaneous connection with multiple sites
-  Remote configuration
-  E-map visualization
-  Auto callback function
-  Time synchronization
-  Watermark-proof
-  Motion detection
-  Dual-screen operation
-  Observation via PDA device
-  Multi-lingual user interface
-  Text insertion from external devices
-  Auto-diagnostic function
-  DVR control
-  PTZ control

B/W Board Cameras

NVC-SB100B, NVC-SB100BCP,
NVC-HB100B, NVC-HB100BCP



Features

- Horizontal resolution: up to 600 TVL
- Min. Illumination: from 0.07 lx/F=2.0
- Lens type:
 - Standard, f=3.6 mm
 - Conical-pinhole, f=3.7 mm
- Power supply: 12 VDC

Specifications

Model	NVC-SB100B	NVC-SB100BCP	NVC-HB100B	NVC-HB100BCP
Pick-up Element	1/3" SONY Super HAD B/W CCD imager			
Horizontal Resolution	420 TVL		600 TVL	
Min. Illumination	0.1 lx/F=2.0	0.07 lx/F=2.0	0.2 lx/F=2.0	0.1 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
Synchronization	Internal			
Lens Type	Standard: f=3.6 mm	Conical-pinhole: f=3.7 mm	Standard: f=3.6 mm	Conical-pinhole: f=3.7 mm
Angle of View (H)	68°	67°	68°	67°
Video Output	1.0 V _{pp} /75 Ohm			
Power Supply	12 VDC			
Power Consumption	1.5 W			
Operating Temperature	0°C ~ 50°C			
Dimensions (mm)	32 (L) x 32 (W) x 27 (H)	32 (L) x 32 (W) x 15 (H)	32 (L) x 32 (W) x 27 (H)	32 (L) x 32 (W) x 15 (H)
Weight	14.5 g	9.5 g	14.5 g	9.5 g

Color Board Cameras

NVC-SC100B, NVC-SC100BCP,
NVC-HC100B, NVC-HC100BCP



Features

- Horizontal resolution: up to 540 TVL
- Min. Illumination: from 0.3 lx/F=2.0
- Lens type:
 - Standard, f=3.8 mm
 - Conical-pinhole, f=3.8 mm
- Power supply: 12 VDC

Specifications

Model	NVC-SC100B	NVC-SC100BCP	NVC-HC100B	NVC-HC100BCP
Pick-up Element	1/3" SONY Super HAD color CCD imager		1/3" SONY Super HAD HQ1 DSP color CCD imager	
Horizontal Resolution	380 TVL		540 TVL	
Min. Illumination	0.3 lx/F=2.0		0.5 lx/F=2.0	
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
White Balance	Auto			
Back Light Compensation (BLC)	Auto			
Synchronization	Internal			
Lens Type	Standard: f=3.8 mm	Conical-pinhole: f=3.8 mm	Standard: f=3.8 mm	Conical-pinhole: f=3.8 mm
Angle of View (H)	66°			
Video Output	1.0 V _{p-p} /75 Ohm			
Power Supply	12 VDC			
Power Consumption	2 W			
Operating Temperature	0°C ~ 50°C			
Dimensions (mm)	32 (L) x 32 (W) x 28 (H)	32 (L) x 32 (W) x 15 (H)	38 (L) x 38 (W) x 38 (H)	38 (L) x 38 (W) x 25 (H)
Weight	17 g	12 g	25 g	20 g

Day/Night Board Cameras

NVC-SDN100B, NVC-SDN100BCP,
NVC-HDN100B, NVC-HDN100BCP



Features

- Electronic Day/Night function
- IR operation capability
- Horizontal resolution: up to 540 TVL
- Min. Illumination: from 0.3 lx/F=2.0
- Lens type:
 - Standard, f=3.8 mm
 - Conical-pinhole, f=3.8 mm
- Power supply: 12 VDC

Specifications

Model	NVC-SDN100B	NVC-SDN100BCP	NVC-HDN100B	NVC-HDN100BCP
Pick-up Element	1/3" SONY Super HAD CCD imager		1/3" SONY Super HAD HQ1 DSP CCD imager	
Horizontal Resolution	380 TVL		540 TVL	
Min. Illumination	0.3 lx/F=2.0		0.5 lx/F=2.0	
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
White Balance	Auto			
Back Light Compensation (BLC)	Auto			
Synchronization	Internal			
Day/Night Switching	Auto			
Lens Type	Standard: f=3.8 mm	Conical-pinhole: f=3.8 mm	Standard: f=3.8 mm	Conical-pinhole: f=3.8 mm
Angle of View (H)	66°			
Video Output	1.0 V _{p-p} /75 Ohm			
Power Supply	12 VDC			
Power Consumption	2 W			
Operating Temperature	0°C ~ 50°C			
Dimensions (mm)	32 (L) x 32 (W) x 28 (H)	32 (L) x 32 (W) x 15 (H)	38 (L) x 38 (W) x 38 (H)	38 (L) x 38 (W) x 25 (H)
Weight	17 g	12 g	25 g	20 g

B/W Dome Cameras

NVC-SB200D, NVC-HB200D



Features

- Horizontal resolution: up to 600 TVL
- Min. Illumination: from 0.04 lx/F=2.0
- Standard lens: f=3.6 mm
- Power supply: 12 VDC

Specifications

Model	NVC-SB200D	NVC-HB200D
Pick-up Element	1/3" SONY Super HAD B/W CCD imager	
Horizontal Resolution	450 TVL	600 TVL
Min. Illumination	0.04 lx/F=2.0	0.06 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/110 000 s	
Auto Gain Control (AGC)	On	
Synchronization	Internal	
Lens Type	Standard: f=3.6 mm	
Angle of View (H)	68°	
Video Output	1.0V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC	
Power Consumption	1.3 W	
Operating Temperature	0°C ~ 50°C	
Dimensions (mm)	87.5 (Ø) x 56.5 (H)	
Weight	120 g	

Color Dome Cameras

NVC-SC200D, NVC-HC200D,
NVC-HC210D



Features

- Horizontal resolution: up to 540 TVL
- Min. Illumination: from 0.3 lx/F=2.0
- Standard lens: f=3.8 mm
- Enclosure color:
 - White: NVC-SC200D/W, NVC-HC200D/W, NVC-HC210D/W
 - Black: NVC-SC200D/B, NVC-HC200D/B, NVC-HC210D/B
- Power supply: 12 VDC

Specifications

Model	NVC-SC200D	NVC-HC200D	NVC-HC210D
Pick-up Element	1/3" SONY Super HAD color CCD imager		1/3" SONY Super HAD HQ1 DSP color CCD imager
Horizontal Resolution	380 TVL	480 TVL	540 TVL
Min. Illumination	0.3 lx/F=2.0	0.8 lx/F=2.0	0.5 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)		
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s		
Auto Gain Control (AGC)	On		
White Balance	Auto		
Back Light Compensation (BLC)	Auto		
Synchronization	Internal		
Lens Type	Standard: f=3.8 mm		
Angle of View (H)	66°		
Video Output	1.0V _{p-p} /75 Ohm (BNC)		
Power Supply	12 VDC		
Power Consumption	2 W		
Operating Temperature	0°C ~ 50°C		
Dimensions (mm)	113 (Ø) x 76.7 (H)		
Weight	220 g		

Color Dome Cameras

NVC-HC220DVF



Features

- Horizontal resolution: 540 TVL
- Min. Illumination: 0.5 lx/F=2.0
- Auto iris DC lens: f=4 ~ 9 mm
- 3-axis camera module adjustment
- Power supply: 12 VDC

Specifications

Model	NVC-HC220DVF
Pick-up Element	1/3" SONY Super HAD HQ1 DSP color CCD imager
Horizontal Resolution	540 TVL
Min. Illumination	0.5 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s
Auto Gain Control (AGC)	On/Off
White Balance	Auto
Back Light Compensation (BLC)	On/Off
Synchronization	Internal
Flickerless Function	On/Off
Lens Type	Auto iris DC: f=4 ~ 9 mm
Angle of View (H)	62° ~ 29°
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	3 W
Operating Temperature	0°C ~ 50°C
Dimensions (mm)	130 (Ø) x 102 (H)
Weight	520 g

Day/Night Dome Cameras

NVC-SDN200D, NVC-HDN200D,
NVC-HDN210D



Features

- Electronic Day/Night function
- IR operation capability
- Horizontal resolution: up to 540 TVL
- Min. Illumination: from 0.3 lx/F=2.0
- Standard lens: f=3.8 mm
- Enclosure color:
 - White: NVC-SDN200D/W, NVC-HDN200D/W, NVC-HDN210D/W
 - Black: NVC-SDN200D/B, NVC-HDN200D/B, NVC-HDN210D/B
- Power supply: 12 VDC

Specifications

Model	NVC-SDN200D	NVC-HDN200D	NVC-HDN210D
Pick-up Element	1/3" SONY Super HAD CCD imager		1/3" SONY Super HAD HQ1 DSP CCD imager
Horizontal Resolution	380 TVL	480 TVL	540 TVL
Min. Illumination	0.3 lx/F=2.0	0.8 lx/F=2.0	0.5 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)		
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s		
Auto Gain Control (AGC)	On		
White Balance	Auto		
Back Light Compensation (BLC)	Auto		
Synchronization	Internal		
Day/Night Switching	Auto		
Lens Type	Standard: f=3.8 mm		
Angle of View (H)	66°		
Video Output	1.0 V _{p-p} /75 Ohm (BNC)		
Power Supply	12 VDC		
Power Consumption	2 W		
Operating Temperature	0°C ~ 50°C		
Dimensions (mm)	113 (Ø) x 76.7 (H)		
Weight	220 g		

B/W Vandal Proof Cameras

NVC-VS10BD, NVC-VS25BD,
NVC-VH35BD, NVC-VS15BD/IR



Features

- Horizontal resolution: up to 580 TVL
- Min. Illumination: from 0.05 lx/F=1.2 (0 lx - IR On)
- Lens type:
 - Standard, f=3.6 mm
 - Auto iris DC, f=4 ~ 9 mm
- Built-in IR LED - 12 pcs. (NVC-VS15BD/IR)
- IP 66
- Vandal proof housing
- Power supply: 12 VDC

Specifications

Model	NVC-VS10BD	NVC-VS25BD	NVC-VH35BD	NVC-VS15BD/IR
Pick-up Element	1/3" SAMSUNG B/W CCD imager			
Horizontal Resolution	420 TVL	420 TVL	580 TVL	420 TVL
Min. Illumination	0.05 lx/F=1.2	0.05 lx/F=1.2	0.08 lx/F=1.2	0 lx (IR On)
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
Back Light Compensation (BLC)	Auto			
Synchronization	Internal			
Lens Type	Standard: f=3.6 mm	Auto iris DC: f=4 ~ 9 mm		Standard: f=3.6 mm
Angle of View (H)	68°	62° ~ 29°	62° ~ 29°	68°
IR LED	N/A	N/A	N/A	12 pcs.
IR Effective Range	N/A	N/A	N/A	Up to 10 m
Degree of Protection	IP 66			
Enclosure	Vandal proof, chrome coated steel, impact resistant poly-carbonate bubble			
Video Output	1.0 V _{p-p} /75 Ohm (BNC)			
Power Supply	12 VDC			
Power Consumption	2.5 W			
Operating Temperature	-10°C ~ 50°C			
Dimensions (mm)	108 (Ø) x 75 (H)			
Weight	640 g			

Color Vandal Proof Cameras

NVC-VS50CD, NVC-VS55CD,
NVC-VH60CD, NVC-VS45CD/IR



Features

- Horizontal resolution: up to 480 TVL
- Min. Illumination: from 0.8 lx/F=1.2 (0 lx - IR On)
- Lens type:
 - Standard, f=3.6 mm
 - Auto iris DC, f=4 ~ 9 mm
- Built-in IR LED - 12 pcs. (NVC-VS45CD/IR)
- IP 66
- Vandal proof housing
- Power supply: 12 VDC

Specifications

Model	NVC-VS50CD	NVC-VS55CD	NVC-VH60CD	NVC-VS45CD/IR
Pick-up Element	1/3" SAMSUNG color CCD imager			
Horizontal Resolution	380 TVL	380 TVL	480 TVL	380 TVL
Min. Illumination	0.8 lx/F=1.2	0.8 lx/F=1.2	0.8 lx/F=1.2	0 lx (IR On)
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
White Balance	Auto			
Back Light Compensation (BLC)	Auto			
Synchronization	Internal			
Lens Type	Standard: f=3.6 mm	Auto iris DC: f=4 ~ 9 mm		Standard: f=3.6 mm
Angle of View (H)	68°	62° ~ 29°	62° ~ 29°	68°
IR LED	N/A	N/A	N/A	12 pcs.
IR Effective Range	N/A	N/A	N/A	Up to 10 m
Degree of Protection	IP 66			
Enclosure	Vandal proof, chrome coated steel, impact resistant poly-carbonate bubble			
Video Output	1.0 V _{p-p} /75 Ohm (BNC)			
Power Supply	12 VDC			
Power Consumption	3 W			
Operating Temperature	-10°C ~ 50°C			
Dimensions (mm)	108 (Ø) x 75 (H)			
Weight	640 g			

Color Vandal Proof Cameras

NVC-HC400VP, NVC-HC400VPH-2



Features

- Horizontal resolution: 540 TVL
- Min. Illumination: 0.5 lx/F=2.0
- Auto iris DC lens: f=4 ~ 9 mm
- 3-axis camera module adjustment
- Built-in heater (NVC-HC400VPH-2)
- IP 65
- Vandal proof housing
- Power supply: 12 VDC, 12 VDC/24 VAC

Specifications

Model	NVC-HC400VP	NVC-HC400VPH-2
Pick-up Element	1/3" SONY Super HAD HQ1 DSP color CCD imager	
Horizontal Resolution	540 TVL	
Min. Illumination	0.5 lx/F=2.0	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On/Off	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Flickerless Function	On/Off	
Lens Type	Auto iris DC: f=4 ~ 9 mm	
Angle of View (H)	62° ~ 29°	
Degree of Protection	IP 65	
Enclosure	Vandal proof, coated aluminium, impact resistant poly-carbonate bubble	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Heater	N/A	Yes
Power Supply	12 VDC	12 VDC/24 VAC
Power Consumption	3 W	5 W 15 W (Heater On)
Operating Temperature	-10°C ~ 50°C	-40°C ~ 50°C (Heater On)
Dimensions (mm)	142 (Ø) x 100 (H)	
Weight	844 g	861 g

Day/Night Vandal Proof Cameras

NVC-HDN400VP, NVC-HDN400VPH-2,
NVC-HDN400VP/IR, NVC-HDN400VPH/IR-2



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 600 TVL
- Min. Illumination: 0 lx (IR On)
- Digital Slow Shutter (DSS)
- Digital Noise Reduction (DNR)
- Auto iris DC lens: f=3.8 ~ 9.5 mm
- 3-axis camera module adjustment (NVC-HDN400VP, NVC-HDN400VPH-2)
- Built-in IR LED - 20 pcs. (NVC-HDN400VP/IR, NVC-HDN400VPH/IR-2)
- Built-in heater (NVC-HDN400VPH-2, NVC-HDN400VPH/IR-2)
- IP 65
- Vandal proof housing
- Power supply: 12 VDC, 12 VDC/24 VAC

Specifications

Model	NVC-HDN400VP	NVC-HDN400VPH-2	NVC-HDN400VP/IR	NVC-HDN400VPH/IR-2
Pick-up Element	1/3" SONY Super HAD HQ1 DSP CCD imager			
Horizontal Resolution	550 TVL - color mode, 600 TVL - B/W mode			
Min. Illumination	0.3 lx/F=1.2 - color mode, 0.1 lx/F=1.2 - B/W mode, 0.008 lx/F=1.2 - B/W mode, DSS (0.64 s)		0.3 lx/F=1.2 - color mode, 0.1 lx/F=1.2 - B/W mode, 0.008 lx/F=1.2 - B/W mode, DSS (0.64 s), 0 lx (IR On)	
S/N Ratio	More than 50 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/120 000 s			
Digital Slow Shutter (DSS)	0.04 s ~ 0.64 s			
Auto Gain Control (AGC)	On/Off			
White Balance	Auto			
Digital Noise Reduction (DNR)	Auto			
Back Light Compensation (BLC)	On/Off			
Synchronization	Internal			
Day/Night Switching	Auto			
Flickerless Function	On/Off			
Lens Type	Auto iris DC: f=3.8 ~ 9.5 mm			
Angle of View (H)	62° ~ 29°			
Digital Zoom	2x			
IR LED	N/A		20 pcs.	
IR Effective Range	N/A		Up to 15 m	
Degree of Protection	IP 65			
Enclosure	Vandal proof, coated aluminium, impact resistant poly-carbonate bubble			
Video Output	1.0 V _{p-p} /75 Ohm (BNC)			
Heater	N/A	Yes	N/A	Yes
Power Supply	12 VDC	12 VDC/24 VAC	12 VDC	12 VDC/24 VAC
Power Consumption	1.8 W	3 W 13 W (Heater On)	4.3 W 9.3 W (IR On)	5 W 15 W (Heater On) 20 W (Heater and IR On)
Operating Temperature	-10°C ~ 50°C	-40°C ~ 50°C (Heater On)	-10°C ~ 50°C	-40°C ~ 50°C (Heater On)
Dimensions (mm)	142 (Ø) x 100 (H)			
Weight	844 g	861 g	874 g	884 g

B/W Bullet Cameras

NVC-70BH



Features

- Horizontal resolution: 420 TVL
- Min. Illumination: 0.1 lx/F=2.0
- Standard lens: f=3.6 mm
- IP 66
- Mounting bracket and sunshield included
- Power supply: 12 VDC

Specifications

Model	NVC-70BH
Pick-up Element	1/3" SAMSUNG B/W CCD imager
Horizontal Resolution	420 TVL
Min. Illumination	0.1 lx/F=2.0
S/N Ratio	More than 46 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s
Auto Gain Control (AGC)	On
Synchronization	Internal
Lens Type	Standard: f=3.6 mm
Angle of View (H)	68°
Degree of Protection	IP 66
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	1.2 W
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	58 (Ø) x 115 (L)
Weight	580 g

B/W Bullet Cameras NVC-80BH



Features

- Horizontal resolution: 380 TVL
- Min. Illumination: 0 lx (IR On)
- Standard lens: f=3.6 mm
- Built-in IR LED - 12 pcs.
- IP 57
- Mounting bracket and sunshield included
- Power supply: 12 VDC

Specifications

Model	NVC-80BH
Pick-up Element	1/3" SAMSUNG B/W CCD imager
Horizontal Resolution	380 TVL
Min. Illumination	0 lx (IR On)
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s
Auto Gain Control (AGC)	On
Synchronization	Internal
Lens Type	Standard: f=3.6 mm
Angle of View (H)	68°
IR LED	12 pcs.
IR Effective Range	Up to 10 m
Degree of Protection	IP 57
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	1 W (IR Off), 3.5 W (IR On)
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	64.6 (Ø) x 95 (L)
Weight	550 g

Color Bullet Cameras

NVC-SC300H



Features

- Horizontal resolution: 380 TVL
- Min. Illumination: 0.5 lx/F=2.0
- Standard lens: f=3.6 mm
- IP 57
- Mounting bracket included
- Power supply: 12 VDC

Specifications

Model	NVC-SC300H
Pick-up Element	1/3" SONY Super HAD color CCD imager
Horizontal Resolution	380 TVL
Min. Illumination	0.5 lx/F=2.0
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s
Auto Gain Control (AGC)	On
White Balance	Auto
Back Light Compensation (BLC)	Auto
Synchronization	Internal
Lens Type	Standard: f=3.6 mm
Angle of View (H)	68°
Degree of Protection	IP 57
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	1 W
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	26 (Ø) x 87 (L)
Weight	300 g

Color Bullet Cameras

NVC-80CH



Features

- Horizontal resolution: 380 TVL
- Min. Illumination: 0 lx (IR On)
- Standard lens: f=4 mm
- Built-in IR LED - 12 pcs.
- IP 57
- Mounting bracket and sunshield included
- Power supply: 12 VDC

Specifications

Model	NVC-80CH
Pick-up Element	1/4" SHARP color CCD imager
Horizontal Resolution	380 TVL
Min. Illumination	0 lx (IR On)
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s
Auto Gain Control (AGC)	On
White Balance	Auto
Synchronization	Internal
Lens Type	Standard: f=4 mm
Angle of View (H)	48°
IR LED	12 pcs.
IR Effective Range	Up to 10 m
Degree of Protection	IP 57
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	1.5 W (IR Off), 3.5 W (IR On)
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	64.6 (Ø) x 95 (L)
Weight	550 g

Color Bullet Cameras

NVC-SC310H/IR, NVC-SC320H/IR



Features

- Horizontal resolution: 420 TVL
- Min. Illumination: 0 lx (IR On)
- Standard lens: f=4.3 mm and f=6 mm
- Built-in IR LED - 23 or 48 pcs.
- IP 65
- Mounting bracket and sunshield included
- Power supply: 12 VDC

Specifications

Model	NVC-SC310H/IR	NVC-SC320H/IR
Pick-up Element	1/3" SONY Super HAD color CCD imager	
Horizontal Resolution	420 TVL	
Min. Illumination	0 lx (IR On)	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On	
White Balance	Auto	
Synchronization	Internal	
Lens Type	Standard: f=4.3 mm	Standard: f=6 mm
Angle of View (H)	58.3°	43.6°
IR LED	23 pcs.	48 pcs.
IR Effective Range	Up to 18 m	Up to 30 m
Degree of Protection	IP 65	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC	
Power Consumption	4 W (IR On) 1.5 W (IR Off)	5.5 W (IR On) 1.5 W (IR Off)
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	60 (Ø) x 100 (L)	70 (Ø) x 102 (L)
Weight	375 g	650 g

Day/Night Bullet Cameras

NVC-HDN300H/IR, NVC-HDN310H/IR



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 600 TVL
- Min. Illumination: 0 lx (IR On)
- Auto iris DC lens: f=3.8 ~ 9.5 mm
- Built-in IR LED - 18 or 36 pcs.
- IP 65 or IP 66
- Mounting bracket and sunshield included
- Power supply: 12VDC

Specifications

Model	NVC-HDN300H/IR	NVC-HDN310H/IR
Pick-up Element	1/3" SONY Super HAD HQ1 DSP CCD imager	
Horizontal Resolution	540 TVL - color mode, 600 TVL - B/W mode	
Min. Illumination	0 lx (IR On)	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	1/50 s
Auto Gain Control (AGC)	On	
White Balance	Auto (2 modes)	
Synchronization	Internal	
Day/Night Switching	Auto	
Lens Type	Auto iris DC: f=3.8 ~ 9.5 mm	
Angle of View (H)	66° ~ 28.6°	
IR LED	18 pcs.	36 pcs.
IR Effective Range	Up to 20 m	Up to 35 m
Degree of Protection	IP 66	IP 65
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC	
Power Consumption	4 W (IR On) 2 W (IR Off)	5 W (IR On) 2.2 W (IR Off)
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	60 (Ø) x 100 (L)	70 (Ø) x 102 (L)
Weight	575 g	650 g

Day/Night Bullet Cameras

NVC-HDN320H/IR



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 600 TVL
- Min. Illumination: 0 lx (IR On)
- Auto iris DC lens: f=3.8 ~ 9.5 mm
- Built-in IR LED - 36 pcs.
- IP 66
- Mounting bracket and sunshield included
- Power supply: 12 VDC

Specifications

Model	NVC-HDN320H/IR
Pick-up Element	1/3" SONY Super HAD HQ1 DSP CCD imager
Horizontal Resolution	540 TVL - color mode, 600 TVL - B/W mode
Min. Illumination	0 lx (IR On)
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	1/50 s
Auto Gain Control (AGC)	On
White Balance	Auto
Synchronization	Internal
Day/Night Switching	Auto
Lens Type	Auto iris DC: f=3.8 ~ 9.5 mm
Angle of View (H)	66° ~ 28.6°
IR LED	36 pcs.
IR Effective Range	Up to 30 m
Degree of Protection	IP 66
Video Output	1.0V _{p-p} /75 Ohm (BNC)
Power Supply	12 VDC
Power Consumption	6 W (IR On) 2 W (IR Off)
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	70 (Ø) x 100 (L)
Weight	925 g

B/W Classic Cameras

NVC-105B, NVC-155B,
NVC-130BH, NVC-180BH



Features

- Horizontal resolution: up to 600 TVL
- Min. Illumination: from 0.01 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC

Specifications

Model	NVC-105B	NVC-155B	NVC-130BH	NVC-180BH
Pick-up Element	1/3" SONY Super HAD B/W CCD imager			
Horizontal Resolution	420 TVL		600 TVL	
Min. Illumination	0.05 lx/F=1.2		0.01 lx/F=1.2	
S/N Ratio	More than 48 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s			
Auto Gain Control (AGC)	On			
Back Light Compensation (BLC)	On/Off			
Synchronization	Internal			
Iris Mode	V or D selectable			
Lens Mount	C/CS			
Video Output	1.0 V _{p-p} /75 Ohm (BNC)			
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	1.65 W/2.75 W	2.75 W	1.65 W/2.75 W	2.75 W
Operating Temperature	-10°C ~ 50°C			
Dimensions (mm)	125 (L) x 62 (W) x 52 (H)			
Weight	460 g	600 g	460 g	600 g

Color Classic Cameras

NVC-235C, NVC-255C



Features

- Horizontal resolution: 380 TVL
- Min. Illumination: 0.1 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC

Specifications

Model	NVC-235C	NVC-255C
Pick-up Element	1/3" SONY Super HAD color CCD imager	
Horizontal Resolution	380 TVL	
Min. Illumination	0.1 lx/F=1.2	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	3.2 W	
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	125 (L) x 62 (W) x 52 (H)	
Weight	460 g	600 g

Color Classic Cameras

NVC-SC500-2, NVC-SC500-3



Features

- Horizontal resolution: 380 TVL
- Min. Illumination: 0.07 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC

Specifications

Model	NVC-SC500-2	NVC-SC500-3
Pick-up Element	1/3" SONY Super HAD color CCD imager	
Horizontal Resolution	380 TVL	
Min. Illumination	0.07 lx/F=1.2	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On/Off	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Flickerless Function	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	2.8 W	3 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 57 (H)	
Weight	220 g	430 g

Color Classic Cameras

NVC-HC530-2, NVC-HC530-3



Features

- Horizontal resolution: 540 TVL
- Min. Illumination: 0.4 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC

Specifications

Model	NVC-HC530-2	NVC-HC530-3
Pick-up Element	1/3" SONY Super HAD HQ1 DSP color CCD imager	
Horizontal Resolution	540 TVL	
Min. Illumination	0.4 lx/F=1.2	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On/Off	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Flickerless Function	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	2.8 W	3 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 57 (H)	
Weight	220 g	430 g

Classic Cameras with Electronic Day/Night Function

NVC-HC510, NVC-HC510-3



Features

- Electronic Day/Night function
- Horizontal resolution: 520 TVL
- Min. Illumination: 0.1 lx/F=1.2
- Power supply: 12 VDC, 230 VAC

Specifications

Model	NVC-HC510	NVC-HC510-3
Pick-up Element	1/3" SONY Super HAD HQ1 DSP color CCD imager	
Horizontal Resolution	520 TVL	
Min. Illumination	0.1 lx/F=1.2	
S/N Ratio	More than 50 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Day/Night Switching	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC	230 VAC
Power Consumption	2.4 W	4 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	128.5 (L) x 58.5 (W) x 53 (H)	
Weight	220 g	550 g

Day/Night Classic Cameras

NVC-SDN500-2, NVC-SDN500-3



Features

- Electronic Day/Night function
- IR operation capability
- Horizontal resolution: 380 TVL
- Min. Illumination: 0.07 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC

Specifications

Model	NVC-SDN500-2	NVC-SDN500-3
Pick-up Element	1/3" SONY Super HAD CCD imager	
Horizontal Resolution	380 TVL	
Min. Illumination	0.07 lx/F=1.2	
S/N Ratio	More than 48 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
Auto Gain Control (AGC)	On/Off	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal	
Day/Night Switching	Auto	
Flickerless Function	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	2.8 W	3 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 57 (H)	
Weight	220 g	430 g

Day/Night Classic Cameras

NVC-525DN, NVC-560DN



* lens not included



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 570 TVL
- Min. Illumination: from 0.01 lx/F=1.2
- Power supply: 12 VDC/24 VAC, 220 ~ 240 VAC

Specifications

Model	NVC-525DN	NVC-560DN
Pick-up Element	1/3" SONY Super HAD CCD imager	
Horizontal Resolution	480 TVL - color mode, 570 TVL - B/W mode	
Min. Illumination	0.5 lx/F=1.2 - color mode, 0.01 lx/F=1.2 - B/W mode	
S/N Ratio	More than 50 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/100 000 s/Manual	
Auto Gain Control (AGC)	On/Off	
White Balance	Auto	
Back Light Compensation (BLC)	On/Off	
Synchronization	Internal/Line-lock with phase adjustment	
Day/Night Switching	Auto/Manual	
Flickerless Function	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{pp} /75 Ohm (BNC)	
Power Supply	12 VDC/24 VAC	220 ~ 240 VAC
Power Consumption	3.5 W	6 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 54 (H)	
Weight	287 g	310 g

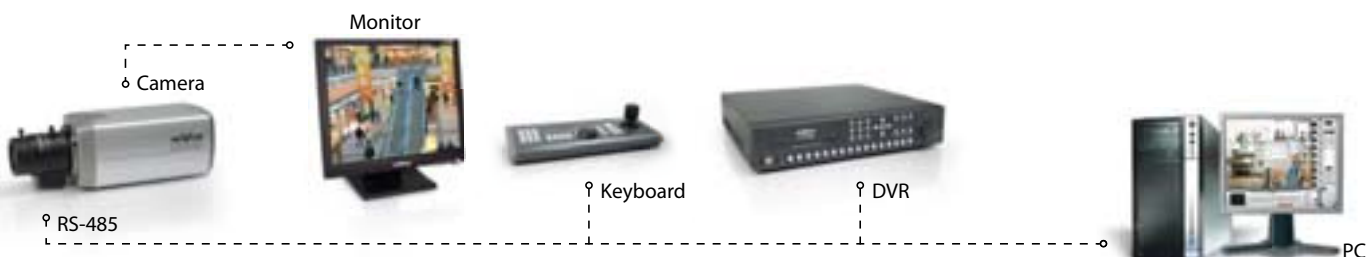
Day/Night Classic Cameras

NVC-625DN, NVC-660DN



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 570 TVL
- Min. Illumination: from 0.003 lx/F=1.2
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- Digital Slow Shutter (DSS)
- Digital zoom: 12x
- Digital Image Stabilizer (DIS)
- Digital Noise Reduction (DNR)
- Various picture effects
- Full configuration (user friendly OSD):
 - directly from the camera
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through an additional dedicated CamConfigurator application
 - from NOVUS[®] video capture cards
 - directly from the front panel of NOVUS[®] 5000 Series DVRs
- Zoom control directly from the front panel of NOVUS[®] DVRs, NOVUS[®] video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-232/RS-485
- Protocols: Novus-C1
- Power supply: 12 VDC/24 VAC, 220 ~ 240 VAC



Specifications

Model	NVC-625DN	NVC-660DN
Pick-up Element	1/3" SONY Super HAD CCD imager	
Horizontal Resolution	480 TVL - color mode, 570 TVL - B/W mode	
Min. Illumination	0.5 lx/F=1.2 - color mode (1/50 s), 0.01 lx/F=1.2 - B/W mode (1/50 s), 0.003 lx/F=1.2 - B/W mode, Digital Slow Shutter (DSS) (1.2 s)	
S/N Ratio	More than 52 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/10 000 s/Manual	
Digital Slow Shutter (DSS)	1/25 s ~ 1.2 s	
Auto Gain Control (AGC)	On/Off	
Wide Dynamic Range (WDR)	On/Off	
White Balance	5 modes: AWB/Indoor/Outdoor/Manual/WAWB	
Back Light Compensation (BLC)	On/Off (3 zones: Centre/Top/Bottom)	
Synchronization	Internal/Line-lock with auto phase adjustment	
Day/Night Switching	Auto/Manual (On/Off)/External	
Flickerless Function	On/Off	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Remote Control	RS-232/RS-485	
Protocol	Novus-C1	
Digital Zoom	12x	
Set-up	On Screen Display (OSD)	
Other Functions	Digital Image Stabilizer (DIS), Digital Noise Reduction (DNR), Various picture effects: Nega/Posi, B/W, Mirror (horizontal), PIP, Freeze, Image adjustment: brightness and sharpness	
Power Supply	12 VDC/24 VAC	220 ~ 240 VAC
Power Consumption	4.5 W	
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 54 (H)	
Weight	265 g	450 g

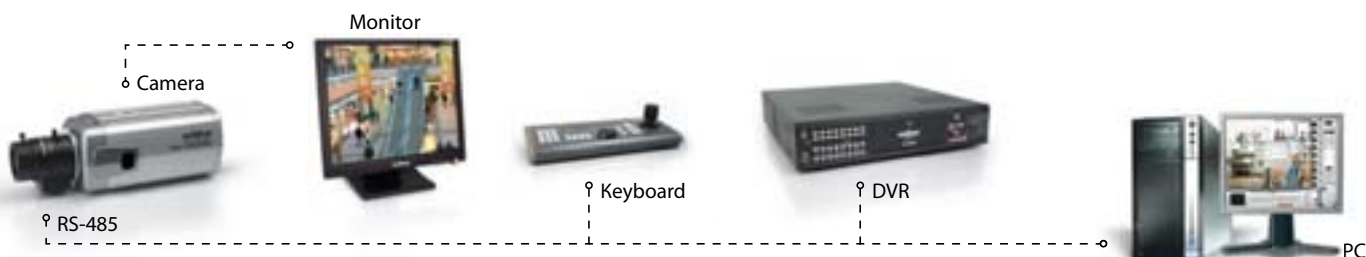
Day/Night Classic Cameras

NVC-825DN, NVC-860DN



Features

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 580 TVL
- Min. Illumination: from 0.0003 lx/F=1.2 (DSS)
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- Digital Slow Shutter (DSS)
- Digital zoom: 3x
- Privacy zones: 4
- Various picture effects
- Full configuration (user friendly OSD):
 - directly from the camera
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through an additional dedicated CamConfigurator application
 - from NOVUS® video capture cards
- Zoom control directly from the front panel of NOVUS® DVRs, NOVUS® video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-485
- Protocols: Novus-C2
- Power supply: 12 VDC/24 VAC, 100 ~ 240 VAC



Specifications

Model	NVC-825DN	NVC-860DN
Pick-up Element	1/3" SONY Double Scan CCD imager	
Horizontal Resolution	480 TVL - color mode, 580 TVL - B/W mode	
Min. Illumination	0.1 lx/F=1.2 - color mode (1/50 s), 0.01 lx/F=1.2 - B/W mode (1/50 s), 0.001 lx/F=1.2 - color mode, Digital Slow Shutter (DSS) (3.2 s), 0.0003 lx/F=1.2 - B/W mode, Digital Slow Shutter (DSS) (3.2 s)	
S/N Ratio	More than 50 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/10 000 s/Manual	
Digital Slow Shutter (DSS)	1/25 s ~ 3.2 s	
Auto Gain Control (AGC)	Off/Low/Mid/High	
Wide Dynamic Range (WDR)	On/Off (setting range: 0 ~ 15)	
White Balance	3 modes: Auto/Hold/User	
Back Light Compensation (BLC)	On/Off (setting range: 0 ~ 15)	
Synchronization	Internal/Line-lock with phase adjustment	Internal
Day/Night Switching	Auto/Manual/External	
Day/Night Level	0 ~ 200	
Filter Delay	0 ~ 15 s	
Flickerless Function	On/Off	
Privacy Zones	4	
Iris Mode	V or D selectable	
Lens Mount	C/CS	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Remote Control	RS-485	
Protocol	Novus-C2	
Digital Zoom	3x	
Set-up	On Screen Display (OSD)	
Other Functions	Built-in photo cell, Various picture effects: Flickerless, Mirror (horizontal and vertical), Nega/Posi, Freeze, Image adjustment: brightness and sharpness	
Power Supply	12 VDC/24 VAC	100 ~ 240 VAC
Power Consumption	6 W	
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	124 (L) x 62 (W) x 57 (H)	
Weight	430 g	560 g

Manual Iris Lenses

NVL-358M, NVL-2810M,
NVL-515M, NVL-550M



Features

- Manual iris varifocal lenses
- Glass-made optics
- Additional Lens_Calc application available - focal length estimation required for monitoring a specific scene

Specifications

Model	NVL-358M	NVL-2810M	NVL-515M	NVL-550M
CCD Format Size	1/3"			
Focal Length	3.5 ~ 8 mm	2.8 ~ 10 mm	5 ~ 15 mm	5 ~ 50 mm
Iris Operation	Manual			
Relative Aperture	F=1.4-C	F=1.4-C	F=1.4-C	F=1.4-C
Mount Type	CS			
Angle of View (H)	80° ~ 34°	82.5° ~ 28°	52.5° ~ 19°	52.5° ~ 5.6°

Auto Iris Lenses

NVL-358D, NVL-2810D,
NVL-550D



Features

- Auto iris varifocal lenses
- Glass-made optics
- Additional Lens_Calc application available - focal length estimation required for monitoring a specific scene

Specifications

Model	NVL-358D	NVL-2810D	NVL-550D
CCD Format Size		1/3"	
Focal Length	3.5 ~ 8 mm	2.8 ~ 10 mm	5 ~ 50 mm
Iris Operation		Auto (D)	
Relative Aperture	F=1.4-360	F=1.4-360	F=1.4-360
Mount Type		CS	
Angle of View (H)	80° ~ 34°	82.5° ~ 28°	52.5° ~ 5.6°

IR Series Auto Iris Lenses

NVL-298D/IR, NVL-308D/IR, NVL-358D/IR,
NVL-416D/IR, NVL-550D/IR



Features

- Auto iris varifocal lenses
- IR range designed lenses
- Dedicated particularly for Day/Night cameras
- Lenses levelling the chromatic aberration
- Glass-made optics
- In the NVL-298D/IR, aspherical lenses are fabricated from a special ED glass characterised by very low light dispersion
- Additional Lens_Calc application available - focal length estimation required for monitoring a specific scene

Specifications

Model	NVL-298D/IR	NVL-308D/IR	NVL-358D/IR	NVL-416D/IR	NVL-550D/IR
CCD Format Size	1/3"				
Focal Length	2.9 ~ 8 mm	3 ~ 8 mm	3.5 ~ 8 mm	4 ~ 16 mm	5 ~ 50 mm
Iris Operation	Auto (D)				
Relative Aperture	F = 1.0-360	F=1.0-360	F=1.4-360	F=1.4-360	F=1.4-360
Mount Type	CS				
Angle of View (H)	92.4° ~ 35.6°	82° ~ 35°	80° ~ 35°	65° ~ 18°	52.7° ~ 5.7°

IR Series Auto Iris Lenses

NVL-2812D/IR, NVL-3085D/IR,
NVL-7550D/IR



Features

- Auto iris varifocal lenses
- Super bright (NVL-3085D/IR), IR range designed lenses
- Dedicated particularly for Day/Night cameras
- Lenses levelling the chromatic and spherical aberration
- Aspherical lenses fabricated from a special ED glass characterised by very low light dispersion
- Additional Lens_Calc application available - focal length estimation required for monitoring a specific scene

Specifications

Model	NVL-2812D/IR	NVL-3085D/IR	NVL-7550D/IR
CCD Format Size		1/3"	
Focal Length	2.8 ~ 12 mm	3 ~ 8.5 mm	7.5 ~ 50 mm
Iris Operation		Auto (D)	
Relative Aperture	F=1.2-360	F=1.0-360	F=1.3-360
Mount Type		CS	
Angle of View (H)	98.5° ~ 23.8°	90.5° ~ 33.6°	36.6° ~ 5.64°

Color & Day/Night Cameras with Motor-zoom Lens

NVC-HC370HZL-2, NVC-HDN370HZL-2

All-In-One

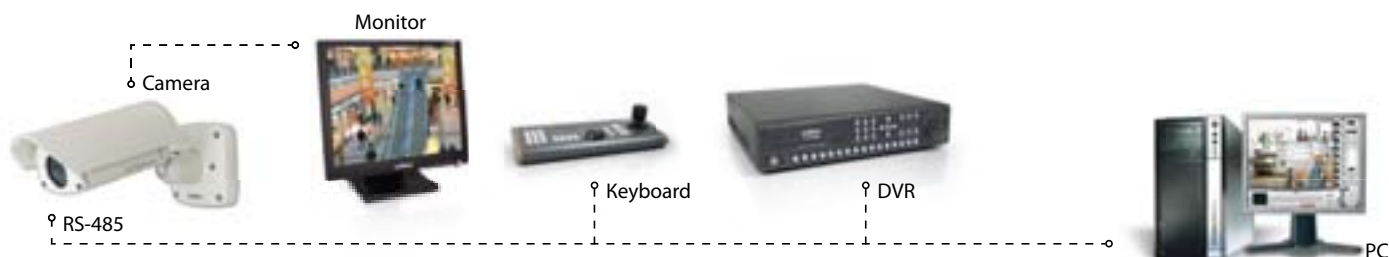


Features

- Cameras with a built-in motor-zoom lens, color and Day/Night, with housing and bracket for wall/in-ceiling mount (All-In-One)
- Mechanical IR cut filter (NVC-HDN370HZL-2)
- IR operation capability (NVC-HDN370HZL-2)
- Horizontal resolution: up to 570 TVL
- Min. Illumination: from 0.001 lx/F=1.6 (DSS)
- Motor-zoom lens, AI and AF function: f=3.8 ~ 85.8 mm and f=3.9 ~ 85.8 mm
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- Digital Slow Shutter (DSS)
- Total zoom: 242x (Optical: 22x/Digital: 11x)
- Various picture effects
- Full configuration (user friendly OSD):
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through an additional dedicated CamConfigurator application
 - from NOVUS® video capture cards
 - directly from the front panel of NOVUS® 5000 Series DVRs
- Zoom control directly from the front panel of NOVUS® DVRs, NOVUS® video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-485 or NV-RC370 wire controller
- Protocols: Novus-C1, Pelco-P, Pelco-D
- Built-in heater and sunshield
- IP 66
- Power supply: 12 VDC/24 VAC

Specifications

Model	NVC-HC370HZL-2	NVC-HDN370HZL-2
Pick-up Element	1/4" SONY Super HAD CCD imager	
Horizontal Resolution	480 TVL	480 TVL - color mode, 570 TVL - B/W mode
Min. Illumination	0.3 lx/F=1.6 - color mode (1/50 s), 0.005 lx/F=1.6 - color mode, DSS (1.2 s)	0.2 lx/F=1.6 - color mode (1/50 s), 0.05 lx/F=1.6 - B/W mode (1/50 s), 0.001 lx/F=1.6 - B/W mode, DSS (1.2 s)
S/N Ratio	More than 52 dB (AGC Off)	
Electronic Shutter	Auto (AES): 1/50 s ~ 1/10 000 s/Manual	
Digital Slow Shutter (DSS)	1/25 s ~ 1.2 s	
Auto Gain Control (AGC)	On/Off	
Wide Dynamic Range (WDR)	On/Off	
Digital Image Stabilizer (DIS)	On/Off	
White Balance	5 modes: AWB/Indoor/Outdoor/Manual/WAWB	
Back Light Compensation (BLC)	Default/Top/Bottom/Level/Off	
Synchronization	Internal	Internal/Line-lock with phase adjustment
Day/Night Switching	N/A	Auto/Manual/External
Lens Type	Motor-zoom lens, AI and AF function: f=3.9 ~ 85.8 mm (F1.6 ~ F32)	Motor-zoom lens, AI and AF function: f=3.8 ~ 85.8 mm (F1.6 ~ F32)
Angle of View (H)	50° ~ 2.4°	
Zoom	Optical 22x, Digital 11x	
Set-up	On Screen Display (OSD)	
Video Output	1.0 V _{p-p} /75 Ohm (BNC)	
Remote Control	RS-485 or NV-RC370 wire controller	
Protocol	Novus-C1, Pelco-P, Pelco-D	
Other Functions	Digital Noise Reduction (DNR), Various picture effects: Nega/Posi, B/W, Mirror, PIP, Freeze, Image adjustment: brightness and sharpness	
Housing	Aluminium body with plastic sunshield and fully-cable-managed mounting bracket for indoor/outdoor, wall/in-ceiling mount	
Degree of Protection	IP 66	
Power Supply	12 VDC/24 VAC	
Power Consumption	8 W	9 W
Operating Temperature	-10°C ~ 50°C	
Dimensions (mm)	308 (L) x 120 (W) x 158 (H)	
Weight	880 g	900 g



Color Cameras with Motor-zoom Lens

NVC-HC520ZL

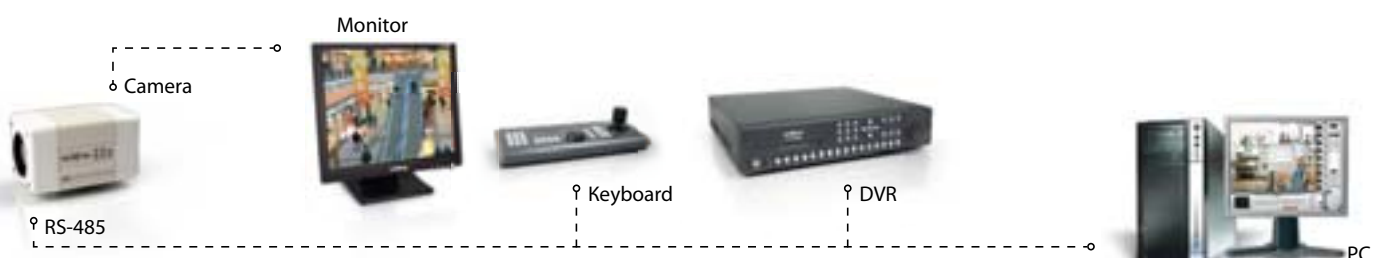


Features

- Compact camera with a built-in motor-zoom lens
- Horizontal resolution: 480 TVL
- Min. Illumination: from 0.005 lx/F=1.6 (DSS)
- Motor-zoom lens, AI and AF function: f=3.9 ~ 85.8 mm
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- Digital Slow Shutter (DSS)
- Total zoom: 242x (Optical: 22x/Digital: 11x)
- Various picture effects
- Full configuration (user friendly OSD):
 - directly from the camera
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through an additional dedicated CamConfigurator application
 - from NOVUS[®] video capture cards
 - directly from the front panel of NOVUS[®] 5000 Series DVRs
- Zoom control directly from the front panel of NOVUS[®] DVRs, NOVUS[®] video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-485
- Protocols: Novus-C1, Pelco-P, Pelco-D
- Power supply: 12 VDC

Specifications

Model	NVC-HC520ZL
Pick-up Element	1/4" SONY Super HAD color CCD imager
Horizontal Resolution	480 TVL
Min. Illumination	0.3 lx/F=1.6 (1/50 s), 0.005 lx/F=1.6 (1.2 s) - Digital Slow Shutter (DSS)
S/N Ratio	More than 52 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/10 000 s/Manual
Digital Slow Shutter (DSS)	1/25 s ~ 1.2 s
Auto Gain Control (AGC)	On/Off
Wide Dynamic Range (WDR)	On/Off
Digital Image Stabilizer (DIS)	On/Off
White Balance	5 modes: AWB/Indoor/Outdoor/Manual/WAWB
Back Light Compensation (BLC)	Default/Top/Bottom/Level/Off
Synchronization	Internal
Lens Type	Motor-zoom lens, AI and AF function: f=3.9 ~ 85.8 mm (F1.6 ~ F32)
Angle of View (H)	50° ~ 2.4°
Zoom	Optical 22x, Digital 11x
Set-up	On Screen Display (OSD)
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Remote Control	RS-485
Protocol	Novus-C1, Pelco-P, Pelco-D
Other Functions	Digital Noise Reduction (DNR), Various picture effects: Nega/Posi, B/W, Mirror, PIP, Freeze, Image adjustment: brightness and sharpness
Power Supply	12 VDC
Power Consumption	4.3 W
Operating Temperature	-10°C ~ 40°C
Dimensions (mm)	106 (L) x 62 (W) x 62 (H)
Weight	335 g



CAMA-mini Series Speed Dome Cameras NVC-MSD10C

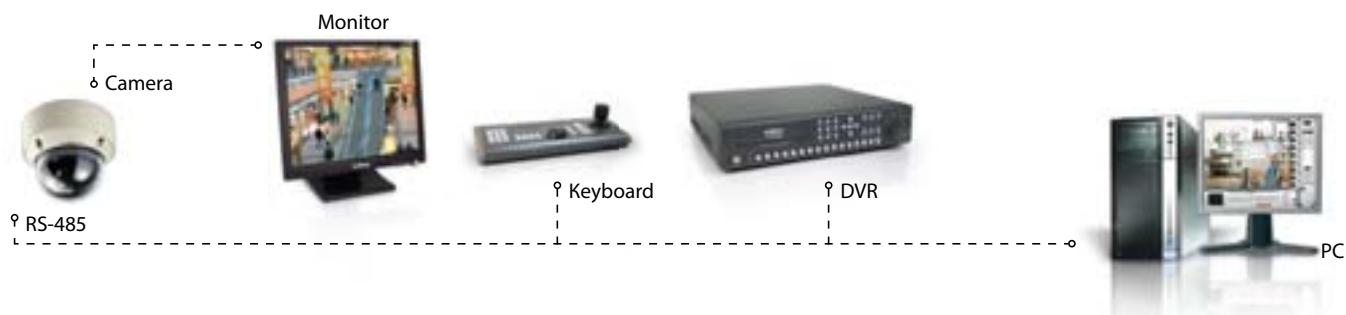


Features

- Integrated mini speed dome camera in a vandal proof housing
- Horizontal resolution: 480 TVL
- Min. Illumination: 0.3 lx/F=1.8
- Motor-zoom lens, AI and AF function: f=3.15 ~ 31.5 mm
- 4 tours
- 4 auto-scan functions
- 60 preset commands
- Total zoom: 100x (Optical: 10x/Digital: 10x)
- 1 sensor input (NO/NC)
- "Auto-Flip" function
- Mirror image function
- Full configuration (user friendly OSD):
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through an additional dedicated CamConfigurator application
 - from NOVUS® video capture cards
 - directly from the front panel of NOVUS® 5000 Series DVRs
- Zoom control directly from the front panel of NOVUS® DVRs, NOVUS® video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-422/RS-485
- Protocols: Novus-C1, Pelco-D
- IP 66
- Vandal proof housing
- Installation:
 - directly on the surface,
 - wall mount using NVB-CM10W bracket,
 - in-ceiling mount using NVB-CM10C bracket
- Power supply: 12 VDC/24 VAC

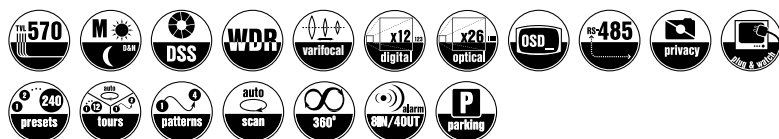
Specifications

Model	NVC-MSD10C
Pick-up Element	1/4" SONY Super HAD color CCD imager
Horizontal Resolution	480 TVL
Min. Illumination	0.3 lx/F=1.8
S/N Ratio	More than 48 dB (AGC Off)
Electronic Shutter	Auto (AES): 1/50 s ~ 1/10 000 s/Manual
Auto Gain Control (AGC)	On/Off
White Balance	4 modes: Auto/Indoor/Outdoor/Manual
Back Light Compensation (BLC)	On/Off
Synchronization	Internal/Line-lock with phase adjustment (auto switching)
Lens Type	Motor-zoom lens, AI and AF function: f=3.15 ~ 31.5 mm (F1.8 ~ F32)
Angle of View (H)	61° ~ 6.5°
Zoom	Optical 10x, Digital 10x
Video Output	1.0 V _{p-p} /75 Ohm (BNC)
Alarm Input	1 sensor input programmable (NO/NC, Off)
Remote Control	RS-422/RS-485
Protocol	Novus-C1, Pelco-D
Set-up	On Screen Display (OSD)
Preset Commands	60 positions
Tours	4 tours (max. 16 presets each)
Auto-Scans	4 auto-scan patterns
Tilt Range	0° ~ 90°
Pan Range	0° ~ 359°
Pan/Tilt Speed	Max. 120°/s
Scanning Speed	Max. 7°/s
Other Functions	"Auto-Flip" function, Flickerless function, Mirror image function, Image adjustment: brightness and sharpness
Enclosure	Weather & vandal proof, die-cast aluminium camera enclosure
Degree of Protection	IP 66
Power Supply	12 VDC/24 VAC
Power Consumption	10 W
Operating Temperature	-10°C ~ 50°C
Dimensions (mm)	145 (Ø) x 117.2 (H)
Weight	1.3 kg



CAMA-I Series Speed Dome Cameras

NVC-SD22C, NVC-SD18DNA,
NVC-SD22DN, NVC-SD26DN



Features

- Color and Day/Night PTZ cameras
- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 570 TVL
- Min. Illumination: from 0.0003 lx/F=1.4 (DSS)
- Motor-zoom lens, AI and AF function
- Wide Dynamic Range (WDR) for enhanced image quality in diverse light conditions
- 8 auto-scan functions
- 8 tours
- 4 patterns
- 240 preset commands
- 8 dynamic privacy zones
- Optical zoom: up to 26x and digital zoom: up to 12x
- 8 sensor inputs and 4 relay outputs (NO/NC) - 8 priority levels, activation of patterns, tours, presets and auto-scans

- "Auto-Flip" function allows the tilt to rotate 180° and reposition itself for continuous viewing of a moving object directly beneath the dome
- Full configuration (user friendly multi-lingual OSD):
 - from the NV-KBD60 & NV-KBD40 keyboards
 - from the PC through CamConfigurator - an additional dedicated application
 - from NOVUS® video capture cards
 - directly from the front panel of NOVUS® 5000 Series DVRs
- PTZ control directly from NOVUS® DVRs, NOVUS® video capture cards, NV-KBD60 & NV-KBD40 keyboards and CamConfigurator application
- Remote control: RS-422/RS-485
- Protocols: Novus-C, Novus-C1, Pelco-P, Pelco-D
- Installation: directly on the surface without an additional housing, suspended ceiling mount using NVH-SDHKIT adapter, wall/ in-ceiling mount using NVH-SD10I & NVH-SD40EH-C housings
- Acrylic bubble included
- Power supply: 24 VAC



Specifications

Model	NVC-SD22C	NVC-SD18DNA	NVC-SD22DN	NVC-SD26DN
Pick-up Element	1/4" SONY Super HAD CCD	1/4" SONY ExView HAD CCD	1/4" SONY Super HAD CCD	1/4" SONY ExView HAD CCD
Horizontal Resolution	480 TVL - color mode	480 TVL - color mode, 570 TVL - B/W mode		
Min. Illumination	0.6 lx/F=1.6 (1/50 s) - color mode 0.008 lx/F=1.6 (1 s) - color mode, DSS	0.7 lx/F=1.4 (1/50 s) - color mode 0.05 lx/F=1.4 (1/3 s) - color mode, DSS 0.008 lx/F=1.4 (1/3 s) - B/W mode, DSS 0.0003 lx/F=1.4 (1 s) - B/W mode, DSS	0.8 lx/F=1.6 (1/50 s) - color mode 0.06 lx/F=1.6 (1/3 s) - color mode, DSS 0.009 lx/F=1.6 (1/3 s) - B/W mode, DSS 0.0008 lx/F=1.6 (1 s) - B/W mode, DSS	0.8 lx/F=1.6 (1/50 s) - color mode 0.06 lx/F=1.6 (1/3 s) - color mode, DSS 0.01 lx/F=1.6 (1/3 s) - B/W mode, DSS 0.0009 lx/F=1.6 (1 s) - B/W mode, DSS
S/N Ratio	More than 50 dB (AGC Off)			
Electronic Shutter	Auto (AES): 1 s ~ 1/10 000 s/Manual			
Digital Slow Shutter (DSS)	1/25 s ~ 1 s			
Auto Gain Control (AGC)	On			
Wide Dynamic Range (WDR)	Yes	N/A	Yes	N/A
White Balance	6 modes		5 modes	6 modes
Back Light Compensation (BLC)	On/Off			
Synchronization	Internal/Line-lock with phase adjustment			
Day/Night Switching	N/A	Auto/Manual		
Lens Type	Motor-zoom lens, AI and AF function: f=3.8 ~ 83.6 mm (F1.6 ~ F32)	Motor-zoom lens, AI and AF function: f=4.1 ~ 73.8 mm (F1.4 ~ F32)	Motor-zoom lens, AI and AF function: f=3.9 ~ 85.8 mm (F1.6 ~ F32)	Motor-zoom lens, AI and AF function: f=3.5 ~ 91 mm (F1.6 ~ F32)
Angle of View (H)	50° ~ 2.6°	48° ~ 2.7°	49.5° ~ 2.4°	54.2° ~ 2.2°
Zoom	Optical 22x, Digital 11x	Optical 18x, Digital 12x	Optical 22x, Digital 11x	Optical 26x, Digital 12x
Video Output	1.0 V _{p-p} /75 Ohm (BNC)			
Alarm Input	8 sensor inputs (NO/NC)			
Alarm Output	4 relay outputs programmable			
Remote Control	Standard RS-422/RS-485			
Protocol	Novus-C, Novus-C1, Pelco-P, Pelco-D			
Set-up	Multi-lingual On Screen Display (OSD): English, Polish, German, French, Spanish, Portuguese, Italian			
Preset Commands	240 positions			
Tours	8 tours (max. 300 functions - presets, patterns, auto-scans and other tours programmable)			
Auto-Scans	8 auto-scan patterns (including spiral scan)			
Patterns	4 patterns (max. 240 s)			
Privacy Zones	8 dynamic privacy zones (user defined switching on)			
Tilt Range	-10° ~ 90° (defined in the camera menu within the range of -10° ~ 10°)			
Pan Range	360° (continuous)			
Pan/Tilt Speed	0.1°/s ~ 380°/s (in Novus-C protocol)			
Preset Speed	Max. 380°/s			
Power Supply	24 VAC			
Power Consumption	20 W			
Operating Temperature	0°C ~ 50°C			
Dimensions (mm)	126 (Ø) x 180 (H)			
Weight	1.2 kg			

Video Capture Cards with Software Compression (A Series)

NVB-025/4A, NVB-050/4A, NVB-050/8A,
NVB-100/8A, NVB-050/16A



An exemplary system configuration can be found on page 92



Features

- QUADRUPLEX: simultaneous recording, monitoring, playback (2 x VGA) and networking
- Software compression: MPEG-4
- Video input: up to 16
- Audio input: up to 4 (with 2 sound cards)
- Up to 16 sensor inputs & 4 sensor outputs
- Composite Output: 1 x RCA (full-screen sequence, events)
- Recording resolution:
 - 704 (H) x 576 (V)
 - 352 (H) x 288 (V)
- Double-screen operation capability (2 x VGA)
- Remote control:
 - NOVUS® PTZ cameras
 - NOVUS® cameras equipped with RS-485 interface
- Protocols: Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others
- Advanced schedule recording & motion detection functions
- Watermark image protection (JPEG)
- Recording modes: Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event
- Playback display: common, panorama and icon views
- Network support: LAN, WAN, xDSL
- Remote connection through DVR_Net, PDA_Net and Internet Explorer
- External devices support: POS, ATM, AC
- CPU load: approx. 90%
- In set included: PTZ converter, alarm input/output interface
- Software: **DVR_Main** server application, **DVR_Net** application for remote connections, **PDA_Net** application for remote connection from PDA devices, **DVR_Uutilities** tools for playing back the video material recorded with DVR_Main application on another PC, **DVR_Calc** for recording time estimation.

Specifications

Model	NVB-025/4A	NVB-050/4A	NVB-050/8A	NVB-100/8A	NVB-050/16A
Video Input	4 x BNC	4 x BNC	8 x BNC	8 x BNC	16 x BNC
Audio Input	1, 2 or 4 (4 with 2 sound cards)				
Alarm Input	4 (NO/NC)	4 (NO/NC)	8 (NO/NC)	8 (NO/NC)	16 (NO/NC)
Alarm Output	4 relay outputs				
Composite Output	1 x RCA (full-screen sequence, events)				
PCI Board Quantity	1				
Recording Resolution	704 (H) x 576 (V) 352 (H) x 288 (V)				
Compression	MPEG-4 (software compression)				
Display Speed	25 fps	50 fps	50 fps	100 fps	50 fps
Recording Speed (352 x 288)	25 fps	50 fps	50 fps	100 fps	50 fps
Display Screen	1, 4	1, 4	1, 4, 6, 9	1, 4, 6, 9	1, 4, 6, 9, 10, 16
Playback Screen	1, 4	1, 4	1, 4, 9	1, 4, 9	1, 4, 9, 16
Recording Mode	Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event				
Notification Function	Sound, Alarm, Relay, E-mail, Phone, Preset				
Backup Drives	HDD, CD-RW, DVD-RW, network drives				
Video Saving Files	AVI, MP4 or MP4+EXE (MP4 with player included)				
Frame Saving Files	JPEG				
Backup	Auto/Manual				
Network Support	LAN, WAN, xDSL				
Software	DVR_Net, PDA_Net (PDA devices), DVR_Calc				
PTZ Camera Control	RS-232/RS-422/RS-485 (from DVR_Main, DVR_Net, PDA_Net, IE)				
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others				
Image Security	Watermark - JPEG files				
User Authorization	3-level password protection (up to 100 users)				
Auto System Recovery	Hardware WATCHDOG function				
External Devices	POS, ATM, AC (Access Control)				
PC SPECIFICATIONS RECOMMENDED					
CPU	Intel Pentium IV 2.4 GHz and higher				
Mother Board	Intel, ASUS, GigaByte based on Intel i845, i865 or i9xx chipsets (NOTE: i845G and i865G are not acceptable!)				
RAM	512 MB				
VGA	ATI Radeon 9000 and higher				
Operating System	Windows 2000/XP/VISTA				

Video Capture Cards with Software Compression

(B Series)

NVB-100/16B, NVB-100/16BLV, NVB-200/16B,
NVB-200/16BLV, NVB-200/32B, NVB-400/32B



An exemplary system configuration can be found on page 92



Features

- QUADRUPLEX: simultaneous recording, monitoring, playback (2 x VGA) and networking
- Software compression: MPEG-4
- Video input: up to 32
- Audio input: up to 4 (with 2 sound cards)
- Up to 16 sensor inputs & 4 sensor outputs
- Composite Output: 1 x RCA (full-screen sequence, quad sequence, PC screen, events)
- Recording resolution:
 - 704 (H) x 576 (V)
 - 704 (H) x 288 (V)
 - 352 (H) x 288 (V)
- Real-time display (BLV models)
- Double-screen operation capability (2 x VGA)
- Remote control:
 - NOVUS® PTZ cameras
 - NOVUS® cameras equipped with RS-485 interface
- Protocols: Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others
- Advanced schedule recording & motion detection functions
- Watermark image protection (JPEG)
- Recording modes: Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event
- Playback display: common, panorama and icon views
- Network support: LAN, WAN, xDSL
- Remote connection through DVR_Net, PDA_Net and Internet Explorer
- External devices support: POS, ATM, AC
- CPU load: approx. 40% - 16 channel video capture cards, approx. 90% - 32 channel video capture cards,
- In set included: PTZ converter, alarm input/output interface
- Software: **DVR_Main** server application, **DVR_Net** application for remote connections, **PDA_Net** application for remote connection from PDA devices, **DVR_Uutilities** tools for playing back the video material recorded with DVR_Main application on another PC, **DVR_Calc** for recording time estimation.

Specifications

Model	NVB-100/16B	NVB-100/16BLV	NVB-200/16B	NVB-200/16BLV	NVB-200/32B	NVB-400/32B
Video Input	16 x BNC	16 x BNC	16 x BNC	16 x BNC	32 x BNC	32 x BNC
Audio Input	1, 2 or 4 (4 with 2 sound cards)					
Alarm Input	16 (NO/NC)					
Alarm Output	4 relay outputs					
Composite Output	1 x RCA (full-screen sequence, quad sequence, PC screen, events)					
PCI Board Quantity	1			2		
Recording Resolution	704 (H) x 576 (V) 704 (H) x 288 (V) 352 (H) x 288 (V)					
Compression	MPEG-4 (software compression)					
Display Speed	100 fps	400 fps (real-time)	200 fps	400 fps (real-time)	200 fps	400 fps
Recording Speed (352 x 288)	100 fps	100 fps	200 fps	200 fps	200 fps	400 fps
Display Screen	1, 4, 6, 9, 10, 16				1, 4, 6, 9, 16, 33	
Playback Screen	1, 4, 9, 16					
Recording Mode	Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event					
Notification Function	Sound, Alarm, Relay, E-mail, Phone, Preset					
Backup Drives	HDD, CD-RW, DVD-RW, network drives					
Video Saving Files	AVI, MP4 or MP4+EXE (MP4 with player included)					
Frame Saving Files	JPEG					
Backup	Auto/Manual					
Network Support	LAN, WAN, xDSL					
Software	DVR_Net, PDA_Net (PDA devices), DVR_Calc					
PTZ Camera Control	RS-232/RS-422/RS-485 (from DVR_Main, DVR_Net, PDA_Net, IE)					
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others					
Image Security	Watermark - JPEG files					
User Authorization	3-level password protection (up to 100 users)					
Auto System Recovery	Hardware WATCHDOG function					
External Devices	POS, ATM, AC (Access Control)					

PC SPECIFICATIONS RECOMMENDED

CPU	Intel Pentium IV 2.4 GHz and higher (or equivalent)	Intel Pentium IV 3.0 GHz and higher
Mother Board	Intel, ASUS, GigaByte based on Intel i845, i865 or i9xx chipsets (NOTE: i845G and i865G are not acceptable!)	Intel, ASUS, GigaByte only, based on Intel i9xx chipset/S-ATA HDD
RAM	512 MB	1 GB
VGA	ATI Radeon 9000 and higher	ATI Radeon X300 and higher
Operating System	Windows 2000/XP/VISTA	

Video Capture Cards with Hardware Compression (MPG Series)

NVB-100/4MPG, NVB-200/8MPG,
NVB-400/16MPG



An exemplary system configuration can be found on page 92



Features

- QUADRUPLEx: simultaneous recording, live monitoring, playback (2 x VGA) and networking
- Hardware compression: MPEG-4
- Video input: up to 16 x BNC
- Audio input: up to 16 x Jack
- Up to 16 sensor inputs and 8 sensor outputs
- Composite Output: 1 x RCA (full-screen sequence)
- Recording resolution:
 - 704 (H) x 576 (V)
 - 704 (H) x 288 (V)
 - 352 (H) x 288 (V)
- Real-time display
- Double-screen operation capability (2 x VGA)
- Remote control:
 - NOVUS® PTZ cameras
 - NOVUS® cameras equipped with RS-485 interface
- Protocols: Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others
- Advanced schedule recording & motion detection functions
- Watermark image protection (JPEG)
- Recording modes: Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event
- Playback display: common, panorama and icon views
- Network support: LAN, WAN, xDSL
- Remote connection through DVR_Net, PDA_Net and Internet Explorer
- External devices support: POS, ATM, AC
- Low CPU load: approx. 10%
- In set included: PTZ converter, alarm input/output interface
- Software: **DVR_Main** server application, **DVR_Net** application for remote connections, **PDA_Net** application for remote connection from PDA devices, **DVR_Utility** tools for playing back the video material recorded with DVR_Main application on another PC, **DVR_Calc** for recording time estimation.

Specifications

Model	NVB-100/4MPG	NVB-200/8MPG	NVB-400/16MPG
Video Input	4 x BNC	8 x BNC	16 x BNC
Audio Input	4 x Jack	8 x Jack	16 x Jack
Alarm Input	4 (NO/NC)	8 (NO/NC)	16 (NO/NC)
Alarm Output	4 relay outputs	4 relay outputs	8 relay outputs
Composite Output	1 x RCA (full-screen sequence, events)		
PCI Board Quantity	1		2
Recording Resolution	704 (H) x 576 (V) 704 (H) x 288 (V) 352 (H) x 288 (V)		
Compression	MPEG-4 (hardware compression)		
Display Speed	100 fps (real-time)	200 fps (real-time)	400 fps (real-time)
Recording Speed (352 x 288)	100 fps	200 fps	400 fps
Display Screen	1, 4	1, 4, 6, 9	1, 4, 6, 9, 16
Playback Screen	1, 4	1, 4, 9	1, 4, 9, 16
Recording Mode	Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event		
Notification Function	Sound, Alarm, Relay, E-mail, Phone, Preset		
Backup Drives	HDD, CD-RW, DVD-RW, network drives		
Video Saving Files	AVI, MP4 or MP4+EXE (MP4 with player included)		
Frame Saving Files	JPEG		
Backup	Auto/Manual		
Network Support	LAN, WAN, xDSL		
Software	DVR_Net, PDA_Net (PDA devices), DVR_Calc		
PTZ Camera Control	RS-232/RS-422/RS-485 (from DVR_Main, DVR_Net, PDA_Net, IE)		
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others		
Image Security	Watermark - JPEG files		
User Authorization	3-level password protection (up to 100 users)		
Auto System Recovery	Hardware WATCHDOG function		
External Devices	POS, ATM, AC (Access Control)		
PC SPECIFICATIONS RECOMMENDED			
CPU	Intel Pentium IV 2.4 GHz and higher		
Mother Board	Intel, ASUS, GigaByte based on Intel i845, i865 or i9xx chipsets (NOTE: i845G and i865G are not acceptable!)		
RAM	512 MB		
VGA	ATI Radeon 9000 and higher		
Operating System	Windows 2000/XP/VISTA		

Video Capture Cards with Hardware Compression (AMPG Series)

NVB-400/16AMPG, NVB-800/32AMPG



An exemplary system configuration can be found on page 92



Features

- QUADRUPLEX: simultaneous recording, live monitoring, playback (2 x VGA) and networking
- Hardware compression: MPEG-4
- Video input: up to 32 x BNC
- Audio input: up to 32 x Jack
- Up to 32 sensor inputs and 8 sensor outputs
- Composite Output: 1 x RCA (PC split screen)
- Recording resolution:
 - 704 (H) x 576 (V)
 - 704 (H) x 288 (V)
 - 352 (H) x 288 (V)
- Real-time display
- Double-screen operation capability (2 x VGA)
- Remote control:
 - NOVUS® PTZ cameras
 - NOVUS® cameras equipped with RS-485 interface
- Protocols: Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others
- Advanced schedule recording & motion detection functions
- Watermark image protection (JPEG)
- Recording modes: Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event
- Playback display: common, panorama and icon views
- Network support: LAN, WAN, xDSL
- Remote connection through DVR_Net, PDA_Net and Internet Explorer
- External devices support: POS, ATM, AC
- Low CPU load: approx. 10%
- In set included: PTZ converter, alarm input/output interface
- Software: **DVR_Main** server application, **DVR_Net** application for remote connections, **PDA_Net** application for remote connection from PDA devices, **DVR_Uutilities** tools for playing back the video material recorded with DVR_Main application on another PC, **DVR_Calc** for recording time estimation.

Specifications

Model	NVB-400/16AMPG	NVB-800/32AMPG
Video Input	16 x BNC	32 x BNC
Audio Input	16 x Jack	32 x Jack
Alarm Input	16 (NO/NC)	32 (NO/NC)
Alarm Output	4 relay outputs	8 relay outputs
Composite Output	1 x RCA (PC split screen)	
PCI Board Quantity	1	2
Recording Resolution	704 (H) x 576 (V) 704 (H) x 288 (V) 352 (H) x 288 (V)	
Compression	MPEG-4 (hardware compression)	
Display Speed	400 fps (real-time)	800 fps (real-time)
Recording Speed (352 x 288)	400 fps	800 fps
Display Screen	1, 4, 6, 9, 16	1, 4, 6, 9, 16, 33
Playback Screen	1, 4, 9, 16	1, 4, 9, 16
Recording Mode	Normal, Sensor, Motion detection, Sensor & Motion, Normal & Event	
Notification Function	Sound, Alarm, Relay, E-mail, Phone, Preset	
Backup Drives	HDD, CD-RW, DVD-RW, network drives	
Video Saving Files	AVI, MP4 or MP4+EXE (MP4 with player included)	
Frame Saving Files	JPEG	
Backup	Auto/Manual	
Network Support	LAN, WAN, xDSL	
Software	DVR_Net, PDA_Net (PDA devices), DVR_Calc	
PTZ Camera Control	RS-232/RS-422/RS-485 (from DVR_Main, DVR_Net, PDA_Net, IE)	
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-P, Pelco-D and others	
Image Security	Watermark - JPEG files	
User Authorization	3-level password protection (up to 100 users)	
Auto System Recovery	Hardware WATCHDOG function	
External Devices	POS, ATM, AC (Access Control)	
PC SPECIFICATIONS RECOMMENDED		
CPU	Intel Pentium IV 2.4 GHz and higher	Intel Core Duo and higher
Mother Board	ASUS, Intel, GigaByte based on Intel i865 or i9xx chipsets	ASUS, Intel, GigaByte based on Intel i9xx chipset/S-ATA HDD
RAM	512 MB	1 GB
VGA	ATI Radeon X300 and higher	
Operating System	Windows 2000/XP/VISTA	



NOVUS®

Professional solution for your CCTV systems



Digital Video Recorders

NV-DVR1004 LITE, NV-DVR1004,
NV-DVR1004NET



An exemplary system configuration can be found on page 93 & 94



Features

- SIMPLEX
- Operating system based on Linux
- Real-time display
- Recording speed: up to 25 fps
- M-JPEG compression
- Recording resolution:
 - 640 x 272
- Supports 1 HDD (NV-DVR1004 LITE) and up to 2 HDDs including 1 to be installed in the swappable drive (NV-DVR1004, NV-DVR1004NET)
- PTZ control directly from the device (NV-DVR1004, NV-DVR1004NET) and through the network (NV-DVR1004NET)
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface (NV-DVR1004, NV-DVR1004NET)
- Protocols: Novus-C, Novus-C1, Novus-C2, Pelco-D (NV-DVR1004, NV-DVR1004NET)
- Networking through IE browser (NV-DVR1004NET)
- Backup function through the network (NV-DVR1004NET)
- Software: PC Viewer for reviewing and copying parts of recorded data from HDD, DVR_Calc for recording time estimation at given parameters
- User friendly OSD
- Power supply: 12 VDC (NV-DVR1004 LITE, 100 ~ 240 VAC/12 VDC PSU in-set included), 100 ~ 240 VAC (NV-DVR1004, NV-DVR1004NET)

Specifications

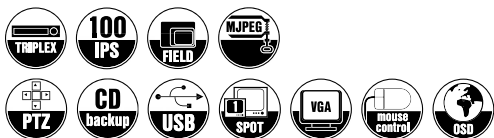
Model	NV-DVR1004 LITE	NV-DVR1004	NV-DVR1004NET
Operation Mode	SIMPLEX		
Operating System	Linux		
Video Input	4 x BNC	4 x BNC, loop-through	
Video Output	1 Main Monitor output (BNC)		
Alarm Input	N/A	4 sensor inputs (NO/NC programmable)	
Alarm Output	N/A	1 relay output (NO/NC)	
Recording Speed	Up to 25 fps		
Compression	M-JPEG		
Recording Resolution	640 x 272		
Recording Mode	Time-lapse, Motion detection	Time-lapse, Event (Alarm and/or Motion detection)	
Display Speed	100 fps (real-time)		
Display Screen	Full screen, 4		
Motion Detection	1 grid with sensitivity adjustment (5 levels)	2 grids with active areas size & sensitivity adjustment	
Video Loss Detection	Yes		
Schedule Recording	Mode (Time-lapse/Motion detection/Off) & recording speed selection in different times of the day (timed to 1 h)	Mode (Time-lapse/Event/Off) & recording speed selection in different times of the day (timed to 1 h)	
Recorded Data Search	By date/time or events		
Event History Log	Up to 64 alarm events for each HDD		
Storage	Supports 1 HDD (max. 500 GB)	Supports up to 2 HDDs (max. 500 GB each), 1 to be installed in the swappable drive	
Backup	USB PC-LINK using the PC Viewer software	PC - directly from HDD using the PC Viewer software	PC - directly from HDD using the PC Viewer software, network backup
External ports	N/A	1 x RS-485 for PTZ cameras	1 x Ethernet - RJ-45 1 x RS-485 for PTZ cameras
PTZ Functions	N/A	PTZ cameras control directly from the device using front panel buttons	PTZ cameras control directly from the device using front panel buttons or through the network (IE)
Protocol	N/A	Novus-C, Novus-C1, Novus-C2, Pelco-D	
Set-up	Multi-lingual On Screen Display (OSD)		
Control	Front panel		Front panel or through the network
Software	DVR_Calc, PC Viewer		
User Authorization	Password protection		
Auto System Recovery	Hardware WATCHDOG function		
Power Supply	12VDC (100 ~ 240 VAC/12 VDC PSU in-set included)	100 ~ 240 VAC	
Power Consumption	Approx. 5 W without HDD, approx. 30 W with HDD	Approx. 16 W without HDD, approx. 40 W with 1 HDD, approx. 50 W with 2 HDDs	
Operating Temperature	0°C ~ 40°C		
Relative Humidity	0% ~ 80% (non-condensing)		
Dimensions (mm)	218 (W) x 44 (H) x 206 (D)	432 (W) x 55 (H) x 321 (D)	
Weight	1.3 kg	4 kg	

Digital Video Recorders

NV-DVR404/CD



An exemplary system configuration can be found on page 95



Features

- TRIPLEX: simultaneous recording, playback and networking
- Operating system based on Linux
- Recording speed: up to 100 fps
- M-JPEG compression (5 levels)
- Recording resolution:
 - 720 x 288
 - 360 x 288
- Supports 1 HDD
- Schedule recording individually adjustable for each day per camera, individual recording modes are also possible
- Motion detection function
- Immediate access to any fragment of the recorded material
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS[®] cameras equipped with RS-485 interface
- Protocol: Novus-C1, Novus-C2, N-Control, Pelco-D
- Alarm recording function
- Archiving files on CD or through the network
- Built-in CD-RW drive
- Network function (live monitoring, playback and archiving)
- User friendly multi-lingual OSD
- User Authorization
- Power supply: 12 VDC (100 ~ 240 VAC/12 VDC PSU in-set included)

Specifications

Model	NV-DVR404/CD
Operation Mode	TRIPLEX
Operating System	Linux
Video Input	4 x BNC
Video Output	1 Main Monitor output (BNC and/or VGA), 1 Spot Monitor output (BNC)
Alarm Input	4 sensor inputs
Alarm Output	1 relay output
Recording Speed	Up to 100 fps
Compression	M-JPEG
Recording Resolution	720 x 288, 360 x 288
Recording Mode	Time-lapse, Event (Alarm, Motion detection, Alarm & Motion Detection)
Display Speed	100 fps (real-time)
Display Screen	Full screen, 4, PIP, sequence, freeze image function, digital zoom of a chosen screen area
Motion Detection	192 detection windows (12x16 grid) with sensitivity defined individually
Video loss detection	Yes
Schedule Recording	Individually adjustable for each day per camera, combination of individual recording modes possibility
Recorded Data Search	By date/time or events
Event History Log	Up to 9990 alarm events
Storage	Supports 1 HDD (max. 500 GB)
Backup	CD, USB Flash Memory, Network
CD-RW Drive	Built-in
External Ports	1 x Ethernet - RJ-45 interface 2 x USB - for upgrading software and backup 1 x RS-485 for PTZ cameras
PTZ Functions	PTZ cameras control directly from the device or via network (N-Viewer 400)
Protocol	Novus-C1, Novus-C2, N-Control, Pelco-D
Control	PS2 PC mouse, Network
Set-up	Multi-lingual On Screen Display (OSD)
Software	N-Viewer 400
User Authorization	Password protection
Auto System Recovery	Hardware WATCHDOG function
Power Supply	12 VDC (100 ~ 240 VAC/12 VDC PSU in-set included)
Power Consumption	Approx. 48 W
Operating Temperature	0°C ~ 40°C
Relative Humidity	0% ~ 80% (non-condensing)
Dimensions (mm)	355 (W) x 70 (H) x 340 (D)
Weight	3.5 kg

Digital Video Recorders

NV-DVR1104/CD, NV-DVR1108/CD,
NV-DVR1116/CD



An exemplary system configuration can be found on page 96



Features

- TRIPLEX: simultaneous recording, playback and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 100 fps
- M-JPEG compression (4 levels)
- Recording resolution:
 - 720 x 288
 - 360 x 288
- Supports up to 2 HDDs; 1 to be installed in the swappable drive
- Schedule recording individually adjustable for week days and weekends with the possibility of individual recording modes
- Motion detection function
- 1-channel real-time audio recording
- Immediate access to any fragment of the recorded material
- PTZ control directly from the device & IR remote control or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Novus-C2, Pelco-D
- NV-KBD60 & NV-KBD30 keyboards compatible
- Alarm recording function
- Archiving files on CD, through the network or USB port
- Built-in CD-RW drive
- Network function (live monitoring, playback, archiving & alarm event e-mail notification, duplicating event files on to FTP server)
- User friendly multi-lingual OSD
- User Authorization
- Covert camera function
- IR remote control
- Power supply: 100 ~ 240 VAC

Specifications

Model	NV-DVR1104/CD	NV-DVR1108/CD	NV-DVR1116/CD
Operation Mode	TRIPLEX		
Operating System	Linux		
Video Input	4 x BNC, loop-through	8 x BNC, loop-through	16 x BNC, loop-through
Video Output	1 Main Monitor output (BNC)	1 Main Monitor output (BNC, S-Video) 1 Spot Monitor output (BNC)	
Alarm Input	4	8	16
Alarm Output	1 relay output		
Audio Input	1 x RCA		
Audio Output	1 x RCA		
Recording Speed	Up to 100 fps for 360 x 288, 50 fps for 720 x 288		
Compression	M-JPEG (4 levels)		
Recording Resolution	720 x 288, 360 x 288		
Recording Mode	Time-lapse, Event (Alarm and/or Motion detection)		
Display Speed	100 fps (real-time)	200 fps (real-time)	400 fps (real-time)
Display Screen	Full screen, 4	Full screen, 4, 8, sequence	Full screen, 4, 9, 13, 16, sequence
Motion Detection	192 detection windows (12x16 grid) with sensitivity adjustment		
Video Loss Detection	Yes		
Schedule Recording	Individually adjustable for week days/weekends and day/night		
Recorded Data Search	By date/time or events		
Event History Log	Up to 2 000 alarm events		
Storage	Supports up to 2 HDDs (max. 500 GB each; 1 to be installed in the swappable drive)		
Backup	CD, USB Flash Memory, PC backup (NC Viewer), network backup		
CD-RW Drive	Built-in		
External Ports	1 x Ethernet - RJ-45 interface 1 x RS-485 for PTZ cameras 1 x USB for external drives 1 x RS-485 for NV-KBD60 & NV-KBD30 keyboards		
PTZ Control	Directly from the device or through the network (IE)		
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-D		
Control	Front panel, IR remote control, Network, NV-KBD60 & NV-KBD30 keyboards		
Set-up	Multi-lingual On Screen Display (OSD)		
Software	NC Viewer		
User Authorization	Password protection		
Auto System Recovery	Hardware WATCHDOG function		
Power Supply	100 ~ 240 VAC		
Power Consumption	Approx. 16 W without HDD and 65 W with 2 HDDs		
Operating Temperature	0°C ~ 40°C		
Relative Humidity	0% ~ 80% (non-condensing)		
Dimensions (mm)	432 (W) x 88 (H) x 427 (D)		
Weight	7 kg		

*VGA modules for all DVR models available (page 91)

Digital Video Recorders

NV-DVR3009, NV-DVR3016



An exemplary system configuration can be found on page 97



Features

- QUADRUPLER: simultaneous recording, monitoring, playback and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 100 fps
- MPEG-4 compression (5 levels)
- Recording resolution:
 - 720 x 288
 - 360 x 288
- Recording speed and resolution defined individually for each camera and each recording mode
- Supports up to 4 HDDs; 1 to be installed in the swappable drive
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 4-channel real-time audio recording
- Immediate access to any fragment of the recorded material
- SHUTTLE/JOG system for viewing recorded files
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Novus-C2, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Backup function onto HDDs or CD-RW/DVD-RW (internal or connected through USB and IEEE1394 ports)
- Networking (simultaneous connections with multiple DVRs, real-time audio transmission and alarm e-mail notification)
- Software: N-Viewer 3000 application for remote connection with the DVR through the network and HDD reading
- User friendly multi-lingual OSD
- Multi-level password protection
- Covert camera function
- IR remote control and PC mouse control
- Power supply: 115 ~ 230 VAC

Specifications

Model	NV-DVR3009	NV-DVR3016
Operation Mode	QUADRUPLEX	
Operating System	Linux	
Video Input	9 x BNC, loop-through	16 x BNC, loop-through
Video Output	1 Main Monitor output (BNC, S-Video and/or VGA), 1 Spot Monitor output (BNC)	
Alarm Input	9	16
Alarm Output	4 relay outputs	
Audio Input	4 x RCA	
Audio Output	1 x RCA	
Recording Speed	Up to 100 fps for 360 x 288, 50 fps for 720 x 288	
Compression	MPEG-4	
Recording Resolution	720 x 288, 360 x 288	
Recording Mode	Time-lapse, Event (Alarm and/or Motion detection)	
Display Speed	225 fps (real-time)	400 fps (real-time)
Display Screen	Full screen, 4, 6, 8, 9, PiP, sequence, user defined, digital zoom of a chosen screen area: 2x, 3x, 4x	Full screen, 4, 6, 8, 9, 13, 16, PiP, sequence, user defined, digital zoom of a chosen screen area: 2x, 3x, 4x
Motion Detection	720 detection windows (30x24 grid) with active areas size, sensitivity & object speed defined individually for each channel	
Video Loss Detection	Yes	
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility	
Recorded Data Search	By date/time or events	
Event History Log	Up to 25 000 alarm events (Video loss detection, Full HDD, Power loss detection, Motion detection)	
Time Synchronization	Automatic time synchronization with NTP server	
Storage	Supports up to 4 HDDs (max. 500 GB each), 1 to be installed in the swappable drive	
Backup	CD-RW or DVD-RW drive, external HDDs through USB and IEEE1394 ports, network backup	
External Ports	1 x Ethernet - RJ-45 interface, 10 Mbit/s 1 x USB for external drives and PC Mouse 1 x FireWire (IEEE1394) for external drives (HDD, CD-RW, DVD-RW) 1 x RS-485 for PTZ cameras 1 x RS-422 for NV-KBD60 & NV-KBD30 keyboards	
PTZ Control	Directly from the device or through the network (N-Viewer 3000, IE)	
Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-D, LG, Lilin, Samsung and others	
Control	Front panel, IR remote control, Network (N-Viewer 3000, IE), NV-KBD60 & NV-KBD30 keyboards, USB PC mouse	
Set-up	Multi-lingual On Screen Display (OSD)	
Software	N-Viewer 3000	
User Authorization	Multi-level password protection, 16 individual user accounts	
Auto System Recovery	Hardware WATCHDOG function	
Power Supply	115 ~ 230 VAC	
Power Consumption	Approx. 63 W without HDD and 102 W with 4 HDDs	
Operating Temperature	5°C ~ 40°C	
Relative Humidity	0% ~ 80% (non-condensing)	
Dimensions (mm)	432 (W) x 88 (H) x 380 (D)	
Weight	8.9 kg (without HDD)	
Rack Mount	Standard EIA 19", 2U	

Digital Video Recorders

NV-DVR5004



An exemplary system configuration can be found on page 98



Features

- TRIPLEX: simultaneous recording, live monitoring and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 100 fps
- MPEG-4 compression (4 levels)
- Recording resolution:
 - 720 x 288
 - 360 x 288
- Recording speed and resolution defined individually for each camera and each recording mode
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 4-channel real-time audio recording
- External devices support ("Text-in" feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Backup: CD-RW drive & external HDDs through USB port, USB Flash Memory, network
- Networking (simultaneous connections with multiple DVRs and alarm e-mail notification)
- Software:
 - IRAS application for remote connection with single or multiple DVRs through the network (full DVR administration, live monitoring and recorded data search)
 - iMAP application that allows the user to create graphic interfaces based on own site schemes (object map editor included)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- Power supply: 100 ~ 240 VAC

Specifications

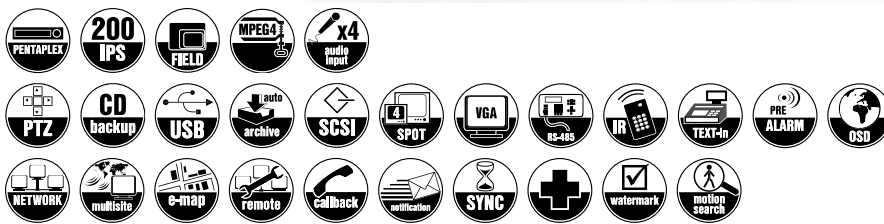
Model	NV-DVR5004
Operation Mode	TRIPLEX
Operating System	Linux
Video Input	4 x BNC, loop-through
Video Output	1 Main Monitor output (BNC, S-Video and/or VGA)
Alarm Input	4 sensor inputs TTL
Alarm Output	2 relay outputs
Audio Input	4 x RCA
Audio Output	1 x RCA
Compression	MPEG-4 (4 quality levels)
Recording Resolution	720 x 288, 360 x 288 - defined individually for each channel
Recording Speed	Up to 100 fps for 360 x 288, 50 fps for 720 x 288
Recording Mode	Time-lapse, Event (Alarm, Motion detection and/or "Text-in")
Display Speed	100 fps (real-time)
Display Screen	Full screen, 4, sequence, 2x digital zoom of a chosen screen area
Motion Detection	192 detection windows (12x16 grid) with sensitivity defined individually for each channel
Video Loss Detection	Yes
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility
Recorded Data Search	By date/time or events (Motion detection, "Text-in")
Event History Log	Up to 10 000 alarm events
Time Synchronization	Automatic time synchronization with NTP server
System Diagnostic	Automatic control of HDD temperature status with local and network notification function
Storage	Supports 1 internal HDD (max. 500 GB)
Backup	CD-RW drive & external HDDs through USB port, USB Flash Memory, network backup
CD-RW Drive	External via USB
External Ports	1 x Ethernet - RJ-45 interface 1 x USB 2.0 for external drives (HDD, CD-RW, Flash Memory) 1 x RS-485 for PTZ cameras or NV-KBD60 & NV-KBD30 keyboards 1 x RS-232 for external devices such as POS, ATM, AC etc.
PTZ Functions	PTZ cameras control directly from the device without an additional keyboard or through the network (IRAS, iMAP)
Protocol	Novus-C, Novus-C1, Pelco-D and others
Control	Front panel, Network (IRAS, iMAP), NV-KBD60 & NV-KBD30 keyboards
Software	IRAS, iMAP
Set-up	Multi-lingual On Screen Display (OSD)
User Authorization	2 users multi-level password protection
Auto System Recovery	Hardware WATCHDOG function
Power Supply	100 ~ 240 VAC
Power Consumption	138 W with HDD
Operating Temperature	5°C ~ 40°C
Relative Humidity	0% ~ 80% (non-condensing)
Dimensions (mm)	220 (W) x 88 (H) x 305 (D)
Weight	3.5 kg (without HDD)

Digital Video Recorders

NV-DVR5009/CD, NV-DVR5016/CD



An exemplary system configuration can be found on page 99



Features

- PENTAPLEX: simultaneous recording, live monitoring, playback, archiving and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 200 fps
- MPEG-4 compression (4 levels)
- Recording resolution:
 - 720 x 288
 - 360 x 288
- 4 spot monitor outputs fully controlled
- Storage of max. 9 TB
- Recording speed and resolution defined individually for each camera and each recording mode
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 4-channel real-time audio recording
- External devices support ("Text-in" feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Built-in CD-RW drive
- Backup: CD-RW drive & external HDDs through USB port, USB Flash Memory, network
- Networking (simultaneous connections with multiple DVRs, real-time audio transmission and alarm e-mail notification)
- Software:
 - IRAS application for remote connection with single or multiple DVRs through the network (full DVR administration, live monitoring and recorded data search)
 - iMAP application that allows the user to create graphic interfaces based on own site schemes (object map editor included)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- Power supply: 100 ~ 240 VAC

Specifications

Model	NV-DVR5009/CD	NV-DVR5016/CD
Operation Mode	PENTAPLEX	
Operating System	Linux	
Video Input	9 x BNC, loop-through	16 x BNC, loop-through
Video Output	1 Main Monitor output (BNC, S-Video and/or VGA), 4 Spot Monitor outputs (BNC)	
Alarm Input	9 sensor inputs TTL	16 sensor inputs TTL
Alarm Output	9 OC	16 OC
Audio Input	4 x RCA	
Audio Output	1 x RCA	
Recording Speed	Up to 200 fps for 360 x 288, 100 fps for 720 x 288	
Compression	MPEG-4 - own algorithm (4 quality levels)	
Recording Resolution	720 x 288, 360 x 288 - defined individually for each channel	
Recording Mode	Time-lapse, Event (Alarm, Motion detection and/or "Text-in")	
Display Speed	225 fps (real-time)	400 fps (real-time)
Display Screen	Full screen, 4, 9, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x, 3x, 4x	Full screen, 4, 9, 16, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x, 3x, 4x
Motion Detection	256 detection windows (16x16 grid) with sensitivity, active areas size & cells number needed for alarm activation defined individually for each channel, additional disappeared object detection function	
Video Loss Detection	Yes	
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility	
Recorded Data Search	By date/time or events (motion, disappeared object, "Text-in")	
Event History Log	Up to 10 000 alarm events	
Time Synchronization	Automatic time synchronization with NTP server	
System Diagnostic	Automatic control of HDD bad sectors number ("Health") & temperature status with local and network notification function	
Storage	Max. 9 TB - supports up to 3 internal HDDs (max. 500 GB each) and external HDDs through SCSI port	
Backup	CD-RW drive & external HDDs through USB port, USB Flash Memory, network backup	
Archiving	Automatic archiving onto internal HDDs & external HDDs connected through SCSI port	
CD-RW Drive	Built-in	
External Ports	1 x Ethernet - RJ-45 interface, 3 x USB 2.0 for external drives (HDD, PC mouse, Flash Memory, POS, ATM, AC etc.) 1 x SCSI for external HDDs, 1 x RS-485 for PTZ cameras, NV-KBD60 & NV-KBD30 keyboards, POS, ATM, AC etc. 1 x RS-232 for POS, ATM, AC etc.	
PTZ Functions	PTZ cameras control directly from the device without an additional keyboard or through the network (IRAS, iMAP, IE)	
Protocol	Novus-C, Novus-C1, Pelco-D and others	
Control	Front panel, IR remote control, Network (IRAS, iMAP, IE), NV-KBD60 & NV-KBD30 keyboards, USB PC mouse	
Set-up	Multi-lingual On Screen Display (OSD)	
Software	IRAS, iMAP	
User Authorization	Multi-level password protection	
Auto System Recovery	Hardware WATCHDOG function	
Power Supply	100 ~ 240 VAC	
Power Consumption	Approx. 100 W with 4 HDDs	
Operating Temperature	5°C ~ 40°C	
Relative Humidity	0% ~ 80% (non-condensing)	
Dimensions (mm)	430 (W) x 88 (H) x 403 (D)	
Weight	10.2 kg (without HDD)	
Rack Mount	Standard EIA 19", 2U	

Digital Video Recorders

NV-DVR5108/DVD, NV-DVR5116/DVD



An exemplary system configuration can be found on page 100



Features

- QUADRUPLEX: simultaneous recording, live monitoring, playback and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 100 fps
- MPEG-4 compression
- Recording resolution:
 - 720 x 288
 - 360 x 288
- Supports up to 3 HDDs, 1 HDD 250 GB in-set included
- Recording speed and quality defined individually for each camera
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 2-channel real-time audio recording
- External devices support ("Text-in" feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Built-in DVD-RW drive
- Backup: onto HDD or USB Flash Memory through USB port, CD/DVD & through the network
- Networking (simultaneous connections with multiple DVRs and alarm e-mail notification)
- Software: RASplus application (for remote administration, live monitoring and recorded data search) with a built-in module for graphical object visualization (maps)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- Power supply: 100 ~ 240 VAC

Specifications

Model	NV-DVR5108/DVD	NV-DVR5116/DVD
Operation Mode	QUADRUPLEX	
Operating System	Linux	
Video Input	8 x BNC, loop-through	16 x BNC, loop-through
Video Output	Main Monitor (1 x BNC, 1 x VGA), Spot Monitor (1 x BNC)	
Alarm Input	8	16
Alarm Output	2 OC	
Audio Input	2 x RCA	
Audio Output	1 x RCA	
Recording Speed	Up to 100 fps (360 x 288), up to 50 fps (720 x 288)	
Compression	MPEG-4 - own algorithm	
Recording Resolution	720 x 288, 360 x 288	
Recording Mode	Time-lapse, Event (Alarm, Motion detection and/or "Text-in")	
Display Speed	200 fps (real-time)	400 fps (real-time)
Display Screen	Full screen, 4, 9, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x	Full screen, 4, 9, 16, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x
Motion Detection	192 detection windows (16x12 grid) with sensitivity & active areas cells number needed for alarm activation defined individually for each channel	
Video Loss Detection	Yes	
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility	
Recorded Data Search	By date/time or events (motion, disappeared object, "Text-in")	
Event History Log	Up to 10 000 alarm events	
Time Synchronization	Automatic time synchronization with NTP server	
System Diagnostic	Automatic control of HDD bad sectors number ("Health") & temperature status with local and network notification function	
Storage	Supports up to 3 internal HDDs (max. 500 GB each), 1 HDD 250 GB in-set included	
Backup	Onto CD/DVD, HDD or USB Flash Memory through USB port, through the network	
DVD-RW Drive	Built-in	
External Ports	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 2 x USB 2.0 for external drives (HDD, PC mouse, Flash Memory) 1 x RS-485 for PTZ cameras or NV-KBD60 & NV-KBD30 keyboards 1 x RS-232 for POS, ATM, AC etc.	
PTZ Functions	PTZ cameras control directly from the device and through the network (RASplus, IE)	
Protocol	Novus-C, Novus-C1, Pelco-D and others	
Control	Front panel, Network (RASplus, IE), NV-KBD60 & NV-KBD30 keyboards, USB PC mouse	
Set-up	Multi-lingual On Screen Display (OSD)	
Software	RASplus	
User Authorization	Creation of user groups and accounts with diverse grants, password protection	
Auto System Recovery	Hardware WATCHDOG function	
Power Supply	100 ~ 240 VAC	
Power Consumption	Approx. 90 W with 4 HDDs	
Operating Temperature	5°C ~ 40°C	
Relative Humidity	0% ~ 80% (non-condensing)	
Dimensions (mm)	430 (W) x 88 (H) x 400 (D)	
Weight	7.3 kg (without HDD)	
Rack Mount	Standard EIA 19", 2U	

Digital Video Recorders

NV-DVR5508/DVD, NV-DVR5516/DVD



An exemplary system configuration can be found on page 101



Features

- PENTAPLEX: simultaneous recording, live monitoring, playback, archiving/mirroring and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 200 fps
- TRIPLEX function: simultaneous recording, live monitoring and playback of a chosen camera on the main monitor
- MPEG-4 compression
- Recording resolution:
 - 720 x 576
 - 720 x 288
 - 360 x 288
- 4 spot monitor outputs with matrix switcher function (16 x 4)
- Storage of max. 9 TB, 1 HDD 250 GB in-set included
- Recording resolution, speed and quality defined individually for each camera
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 4-channel real-time audio recording
- External devices support ("Text-in" feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS[®] cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Built-in DVD-RW drive
- Backup: onto HDD or USB Flash Memory through USB port, CD/DVD & through the network
- Networking (simultaneous connections with multiple DVRs and alarm e-mail notification)
- Software: RASplus application (for remote administration, live monitoring and recorded data search) with a built-in module for graphical object visualization (maps)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- Power supply: 100 ~ 240 VAC

Specifications

Model	NV-DVR5508/DVD	NV-DVR5516/DVD
Operation Mode	PENTAPLEX	
Operating System	Linux	
Video Input	8 x BNC, loop-through	16 x BNC, loop-through
Video Output	Main Monitor (1 x BNC, 1 x S-Video, 1 x VGA), Spot Monitor (4 x BNC)	
Alarm Input	8	16
Alarm Output	7 OC, 1 relay output	15 OC, 1 relay output
Audio Input	4 x RCA	
Audio Output	1 x RCA	
Recording Speed	Up to 200 fps (360 x 288), up to 100 fps (720 x 288), up to 50 fps (720 x 576)	
Compression	MPEG-4 - own algorithm	
Recording Resolution	720 x 576, 720 x 288, 360 x 288	
Recording Mode	Time-lapse, Event (Alarm, Motion detection and/or "Text-in")	
Display Speed	200 fps (real-time)	400 fps (real-time)
Display Screen	Full screen, 4, 9, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x, 3x, 4x	Full screen, 4, 9, 16, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x, 3x, 4x
Motion Detection	256 detection windows (16x16 grid) with sensitivity & active areas cells number needed for alarm activation defined individually for each channel	
Video Loss Detection	Yes	
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility	
Recorded Data Search	By date/time or events (motion, disappeared object, "Text-in")	
Event History Log	Up to 10 000 alarm events	
Time Synchronization	Automatic time synchronization with NTP server	
System Diagnostic	Automatic control of HDD bad sectors number ("Health") & temperature status with local and network notification function	
Storage	Max. 9 TB - supports up to 3 internal HDDs (max. 500 GB each) and external HDDs through SCSI port, 1 HDD 250 GB in-set included	
Backup	Onto CD/DVD, HDD or USB Flash Memory through USB port, through the network	
Archiving	Automatic archiving onto internal or external HDD connected through SCSI or USB port	
Mirroring	Automatic backup onto internal HDDs	
DVD-RW Drive	Built-in	
External Ports	1 x Ethernet - RJ-45 interface, 10/100 Mbps/s, 3 x USB 2.0 for external drives (HDD, PC mouse, Flash Memory), 1 x SCSI for external HDDs, 1 x RS-485 for PTZ cameras or NV-KBD60 & NV-KBD30 keyboards, 1 x RS-232 for POS, ATM, AC etc.	
PTZ Functions	PTZ cameras control directly from the device and through the network (RASplus, IE)	
Protocol	Novus-C, Novus-C1, Pelco-D and others	
Control	Front panel, IR remote control (in-set included), Network (RASplus, IE), NV-KBD60 & NV-KBD30 keyboards, USB PC mouse	
Set-up	Multi-lingual On Screen Display (OSD)	
Software	RASplus	
User Authorization	Creation of user groups and accounts with diverse grants, password protection	
Auto System Recovery	Hardware WATCHDOG function	
Power Supply	100 ~ 240 VAC	
Power Consumption	Approx. 100 W with 4 HDDs	
Operating Temperature	5°C ~ 40°C	
Relative Humidity	0% ~ 80% (non-condensing)	
Dimensions (mm)	430 (W) x 88 (H) x 403 (D)	
Weight	10.2 kg (without HDD)	
Rack Mount	Standard EIA 19", 2U	

Digital Video Recorders

NV-DVR5816/DVD



An exemplary system configuration can be found on page 102



Features

- PENTAPLEX: simultaneous recording, live monitoring, playback, archiving/mirroring and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 400 fps for 720 x 288 - „real-time recording“ DVR
- MPEG-4 compression
- Recording resolution:
 - 720 x 576
 - 720 x 288
 - 360 x 288
- 4 spot monitor outputs with matrix switcher function (16 x 4)
- Storage of max. 9 TB, 1 HDD 250 GB in-set included
- Recording resolution, speed and quality defined individually for each camera
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 16-channel real-time audio recording
- External devices support (“Text-in” feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD60 & NV-KBD30 keyboards compatible
- Built-in DVD-RW drive
- Backup: onto HDD or USB Flash Memory through USB port, CD/DVD & through the network
- Networking (simultaneous connections with multiple DVRs and alarm e-mail notification)
- Software: RASplus application (for remote administration, live monitoring and recorded data search) with a built-in module for graphical object visualization (maps)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- Power supply: 100 ~ 240 VAC

Specifications

Model	NV-DVR5816/DVD
Operation Mode	PENTAPLEX
Operating System	Linux
Video Input	16 x BNC, loop-through
Video Output	Main Monitor (1 x BNC, 1 x S-Video, 1 x VGA), Spot Monitor (4 x BNC)
Alarm Input	16
Alarm Output	12 OC, 4 relay outputs
Audio Input	16 x RCA
Audio Output	1 x RCA
Recording Speed	Up to 400 fps (720 x 288, 360 x 288), up to 200 fps (720 x 576)
Compression	MPEG-4 - own algorithm
Recording Resolution	720 x 576, 720 x 288, 360 x 288
Recording Mode	Time-lapse, Event (Alarm, Motion detection, Object detection and/or "Text-in")
Display Speed	400 fps (real-time)
Display Screen	Full screen, 4, 9, 16, PiP, sequence, user defined, freeze image function, digital zoom of a chosen screen area: 2x, 3x, 4x
Motion Detection	256 detection windows (16x16 grid) with sensitivity & active areas cells number needed for alarm activation defined individually for each channel
Video Loss Detection	Yes
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility
Recorded Data Search	By date/time or events (motion, disappeared object, "Text-in")
Event History Log	Up to 5 000 alarm events
Time Synchronization	Automatic time synchronization with NTP server
System Diagnostic	Automatic control of HDD bad sectors number ("Health") & temperature status with local and network notification function
Storage	Max. 9 TB - supports up to 4 HDDs installed in Hot Swap drives (max. 500 GB each) and external HDDs through SCSI port, 1 HDD 250 GB in-set included
Backup	Onto CD/DVD, HDD or USB Flash Memory through USB port, through the network
Archiving	Automatic archiving onto internal or external HDD connected through SCSI or USB port
Mirroring	Automatic backup onto internal HDDs
DVD-RW Drive	Built-in
External Ports	1 x Ethernet - RJ-45 interface, 10/100 Mbps/s, 3 x USB 2.0 for external drives (HDD, PC mouse, Flash Memory), 1 x SCSI for external HDDs, 2 x RS-485 for PTZ cameras or NV-KBD60 & NV-KBD30 keyboards, 2 x RS-232 for POS, ATM, AC etc.
PTZ Functions	PTZ cameras control directly from the device and through the network (RASplus, IE)
Protocol	Novus-C, Novus-C1, Pelco-D and others
Control	Front panel, IR remote control (in-set included), Network (RASplus, IE), NV-KBD60 & NV-KBD30 keyboards, USB PC mouse
Set-up	Multi-lingual On Screen Display (OSD)
Software	RASplus
User Authorization	Creation of user groups and accounts with diverse grants, password protection
Auto System Recovery	Hardware WATCHDOG function
Power Supply	100 ~ 240 VAC
Power Consumption	Approx. 105 W with 4 HDDs
Operating Temperature	5°C ~ 40°C
Relative Humidity	0% ~ 80% (non-condensing)
Dimensions (mm)	430 (W) x 177 (H) x 504 (D)
Weight	17.8 kg (without HDD)
Rack Mount	Standard EIA 19", 4U

System Keyboards

NV-KBD60



Features

- System keyboard designed to remotely control NOVUS® DVRs, speed domes, other NOVUS® cameras incorporating the RS-485 interface
- Protocols for DVR control: Novus-D1, Novus-D2, Novus-D3, N-Control
- Protocols for controlling speed domes and other camera types: Novus-C, Novus-C1, Novus-C2, Pelco-D
- Three-axial joystick with the zoom control ring
- 37 multi-function keys
- SHUTTLE ring, JOG dial for controlling DVR functions
- 2 x 16 digits display
- Flexible configuration of user grants, each user access secured by password
- Multi-lingual menu
- Power supply: 12 VDC

Specifications

Model	NV-KBD60
Equipment Connection	PTZ Cameras: NOVUS® CAMA-I Series speed domes, NOVUS® CAMA-mini Other NOVUS® cameras: NVC-625DN, NVC-660DN, NVC-825DN, NVC-860DN, NVC-HC520ZL, NVC-HC370HXL-2 All-In-One (up to 30 cameras with various speeds)
	NOVUS® Digital Video Recorders: NV-DVR900, NV-DVR1600, 5000, 3000 & 1100 Series (up to 10 devices)
Camera Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-D
DVR Protocol	Novus-D1, Novus-D2, Novus-D3, N-Control
Joystick	Three-axial joystick (auto-returning, zoom)
Buttons	37 multi-function keys (made of silicon)
Knob	Jog/Shuttle
Display	16 x 2 backlit LCD
External Ports	1 x RS-422/RS-485 (RJ-11) for connection with DVRs 1 x RS-485 (2 x RJ-11) for connection with PTZ cameras 1 x RS-232 (D-Sub 9 Pin) for keyboard software upgrades from the PC
Power Supply	12 VDC
Power Consumption	15 W
Operating Temperature	5°C ~ 40°C
Dimensions (mm)	364 (W) x 48 (H) x 146 (D)
Weight	1.2 kg

Keyboards

NV-KBD30



Features

- Keyboard for remote control of NOVUS® DVRs
- Protocols for DVR control: Novus-D1, Novus-D2, Novus-D3
- 27 multi-function keys
- 4 digit LED display
- Power supply: 9 VDC

Specifications

Model	NV-KBD30
Equipment Connection	NOVUS® Digital Video Recorders: NV-DVR900, NV-DVR1600, 5000, 3000 & 1100 Series (up to 9 devices)
DVR Protocol	Novus-D1, Novus-D2, Novus-D3
Buttons	27 multi-function keys
Display	LED, 4 digit
External Ports	RS-485 (RJ-45) for connection with DVRs
Power Supply	9 VDC
Power Consumption	2.5 W
Operating Temperature	5°C ~ 40°C
Dimensions (mm)	220 (W) x 56 (H) x 180 (D)
Weight	0.8 kg



Keyboards

NV-KBD40



Features

- Keyboard designed to remotely control NOVUS® speed domes, other NOVUS® cameras incorporating the RS-485 interface
- Protocols for controlling speed domes and other camera types: Novus-C, Novus-C1, Novus-C2, Pelco-D
- Three-axial joystick with the zoom control ring
- 33 multi-function keys
- 2 grant level: administrator (password protected access) and operator
- 2 x 16 digit display
- Power supply: 9VDC

Specifications

Model	NV-KBD40
Equipment Connection	PTZ Cameras: NOVUS® CAMA-I Series speed domes, NOVUS® CAMA-mini Other NOVUS® cameras: NVC-625DN, NVC-660DN, NVC-825DN, NVC-860DN, NVC-HC520ZL, NVC-HC370HZZL-2 All-In-One (up to 29 cameras with various speeds)
Camera Protocol	Novus-C, Novus-C1, Novus-C2, Pelco-D
Joystick	Three-axial joystick (auto-returning, zoom function)
Buttons	33 multi-function keys
Display	16 x 2 backlit LCD
External Ports	1 x RS-485 (2 x RJ-11) for connection with PTZ cameras
Power Supply	9VDC
Power Consumption	3 W
Operating Temperature	5°C ~ 40°C
Dimensions (mm)	335 (W) x 56 (H) x 180 (D)
Weight	1.25 kg



Keyboard

RS-485



Camera



Camera



Camera

B/W Monitors

NVM-009M, NVM-012M,
NVM-012MA, NVM-014M



Features

- CRT Size: 9", 12", 14"
- Resolution: up to 1000 TVL
- Audio -NVM-012MA model
- Front panel control
- Metal case: black or white
- Power supply: 100 ~ 240 VAC

Specifications

Model	NVM-009M	NVM-012M/NVM-012MA	NVM-014M
CRT Size	9"	12"	14"
Video Input	1 x BNC loop-through, 75 Ohm/Hi-Z		
Audio Input	1 x RCA loop-through (models with an "A")		
Resolution	900 TVL	1000 TVL	
Operation System	CCIR/EIA (Auto Scan)		
Front Panel Control	Power On/Off switch, H-hold and V-hold, contrast, brightness and volume adjustment (models with an "A")		
Linearity	Horizontal: 10%, Vertical: 10%		
Case	Metal (black or white)		
Power Supply	100 ~ 240 VAC		
Power Consumption	21 W	22 W	27 W
Operating Temperature	0°C ~ 50°C		
Relative Humidity	10% ~ 85% (non-condensing)		
Dimensions (mm)	220 (W) x 237.5 (H) x 261 (D)	310 (W) x 303.5 (H) x 302 (D)	356 (W) x 333 (H) x 381 (D)
Weight	4.6 kg	7.6 kg	10.5 kg

B/W Monitors

NVM-015M, NVM-015MA,
NVM-017MA



Features

- CRT Size: 15", 17"
- Resolution: 1000 TVL
- Audio - NVM-015MA, NVM-017MA models
- Front panel control
- Metal case: black or white
- Power supply: 100 ~ 240 VAC

Specifications

Model	NVM-015M/NVM-015MA	NVM-017MA
CRT Size	15"	17"
Video Input	1 x BNC loop-through, 75 Ohm/Hi-Z	2 x BNC loop-through, 75 Ohm/Hi-Z
Audio Input	1 x RCA loop-through (models with an "A")	2 x RCA loop-through
Resolution	1000 TVL	
Operation System	CCIR/EIA (Auto Scan)	
Front Panel Control	Power On/Off switch, H-hold and V-hold, contrast, brightness and volume adjustment (models with an "A")	
Linearity	Horizontal: 10%, Vertical: 10%	
Case	Metal (black or white)	
Power Supply	100 ~ 240 VAC	
Power Consumption	28 W	38 W
Operating Temperature	0°C ~ 50°C	
Relative Humidity	10% ~ 85% (non-condensing)	
Dimensions (mm)	356 (W) x 333 (H) x 381 (D)	405 (W) x 370.5 (H) x 406 (D)
Weight	11.2 kg	14.4 kg

Color Monitors

NVM-015CH, NVM-017CH,
NVM-019CH, NVM-021CS



Features

- CRT Size: 15", 17", 19", 21"
- Resolution: up to 800 TVL
- S-Video input
- Audio
- Front panel control
- Black metal case
- Power supply: 100 ~ 240 VAC

Specifications

Model	NVM-015CH	NVM-017CH	NVM-019CH	NVM-021CS
CRT Size	15"	17"	19"	21"
CRT Dot Pitch	0.28 mm	0.28 mm	0.27 mm	0.76 mm
Video Input	2 x BNC loop-through, 75 Ohm/Hi-Z			
Audio Input	2 x RCA loop-through			
S-Video Input/Output	Yes			
Resolution	700 TVL, 800 TVL (S-VHS)			450 TVL, 500 TVL (S-VHS)
Operation System	PAL/NTSC (Auto Scan)			
Front Panel Control	Power On/Off switch, video and audio select switch, contrast, brightness, color, sharpness and volume adjustment			
Underscan Select Switch	N/A			Yes
16:9 Select Switch	N/A		Yes	
Linearity	Horizontal: 10%, Vertical: 10%			
Case	Metal (black)			
Power Supply	100 ~ 240 VAC			
Power Consumption	68 W	72 W	78 W	70 W
Operating Temperature	0°C ~ 50°C			
Relative Humidity	10% ~ 85% (non-condensing)			
Dimensions (mm)	356 (W) x 333 (H) x 381 (D)	405 (W) x 370 (H) x 406 (D)	442 (W) x 405 (H) x 446 (D)	480 (W) x 462 (H) x 462 (D)
Weight	13.2 kg	19.4 kg	24 kg	25.5 kg

LCD Monitors

NVM-317LCD, NVM-319LCD



Features

- High resolution color TFT LCD Panel
- Digital 3D comb filter for sharp and clear picture with natural colors
- Panel type: 17", 19"
- Multi-lingual On Screen Display (OSD)
- Video input: 2 x BNC, S-Video, VGA
- Operation System: PAL/NTSC (Auto Scan)
- Audio input: RCA, Jack
- Internal speakers
- Power supply: 12 VDC (100 ~ 240 VAC/12 VDC PSU in-set included)

Specifications

Model		NVM-317LCD	NVM-319LCD
Panel Type		17" color TFT LCD Panel	19" color TFT LCD Panel
Screen Size (Diagonal)		431 (mm)	480 (mm)
Resolution		580 TVL	580 TVL
Viewable Size (mm)		337.9 (H) x 270.3 (V)	376.3 (H) x 301.6 (V)
Dot Pitch (mm)		0.264 x 0.264	0.297 x 0.297
Viewing Angle (L/R/T/B)		80°/80°/80°/80°	85°/85°/85°/70°
Contrast Ratio		400:1	500:1
Brightness		350 cd/m ²	250 cd/m ²
Display Color		16.7 mln	16.7 mln
Response Time		8 ms	8 ms
Video Input		2 x CVBS: BNC connector 1 x S-Video: Mini-DIN 4 Pin connector 1 x VGA	2 x CVBS: BNC connector 1 x S-Video: Mini-DIN 4 Pin connector 1 x VGA
Audio	Audio Input	Stereo 1 V _{p-p} /1 kHz	Stereo 1 V _{p-p} /1 kHz
	Speaker	2 x 1.0 W	2 x 1.0 W
Set-up		Multi-lingual On Screen Display (OSD)	
Operation System		PAL/NTSC (Auto Scan)	
Power Supply		12 VDC (100 ~ 240 VAC/12 VDC PSU in-set included)	
Power Consumption		40 W	40 W
Operating Temperature		5°C ~ 40°C	
Case		Plastic (black)	
Dimensions (mm)		370 (W) x 390 (H) x 190 (D)	420 (W) x 420 (H) x 190 (D)
Weight		3.5 kg	4.5 kg

Video Distributors & Amplifiers

NV-102VDA, NV-104VD, NV-408VD,
NV-408VDA, NV-1632VDA



Features

- Active video distributor
- Video input up to 16
- Video output: up to 32
- Wide bandwidth, video gain compensation amplification
- 10 dB adjustable image gain with HF compensation
- Sharpness and Brightness adjustment
- Transmission range: 800 meters (RG59 coaxial cable)
- Power supply: 12 VDC (230 VAC/12 VDC PSU in-set included)


Specifications

Model	NV-102VDA	NV-104VD	NV-408VD	NV-408VDA	NV-1632VDA
Video Input	1	1	4	4	16
Video Output	2	4	8	8	32
Video Input Level	0.8 - 1.2 V _{p-pr} , 75 Ohm				
Video Bandwidth	10 Hz - 10 MHz				
Video Amplifier	Yes	N/A		Yes	
Brightness Adjustment	Yes	N/A		Yes	
Sharpness Adjustment	Yes	N/A		Yes	
Power Supply	12 VDC (PSU in-set included)				
Power Consumption	1.2 W	6 W			
Dimensions (mm)	138 (W) x 28 (H) x 84 (D)	138 (W) x 29.5 (H) x 86 (D)	150 (W) x 44 (H) x 134 (D)		483 (W) x 88 (H) x 44 (D)
Weight	130 g	115 g	600 g		1400 g
Material	ABS (black)				Metal (black)
Rack Mount	N/A				Standard EIA 19", 2U




Serial Data Distributors





Model	NVRS-004DD	NVRS-016DD
Device Type	Active serial data distributor	
Data Input	1 x RS-232 (D-Sub 9 pin)/2 x RS-485 (screw terminal)	
Data Output Port	4 ports (screw terminal)	16 ports (screw terminal)
Data Output	RS-485	
Control Signal Transmission Distance	Up to 1200 m	
Power Supply	12 VDC (PSU in-set included)	
Power Consumption	4.2 W	
Operating Temperature	0°C ~ 45°C	
Dimensions (mm)	133 (W) x 44 (H) x 76 (D)	482 (W) x 44 (H) x 100 (D)
Weight	425 g	1100 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)	
Material	Metal (black)	
Rack Mount	N/A	Standard EIA 19", 1U
		

Repeaters/Amplifiers

Model	NV-001DR
Device Type	RS-485 data signal repeater/amplifier
Data Input	RS-485 (screw terminal)
Data Output	RS-485 (screw terminal)
Protection	2.5 kV isolation of input and output circuits, surge protection
Power Supply	12 VDC (PSU in-set included)
Power Consumption	4.2 W
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	27.5 (L) x 88 (W) x 67 (H)
Weight	120 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)
	


Twisted-pair Signal Transmission

Model	NVPT-A111VRH	NVPT-A111VT	NVPT-111AVDT
Device Type	Active video receiver	Active video transmitter	Active video & data transmitter NVPT-111AVDT(T) & receiver NVPT-111AVDT(R)
Video Input/Output	1 x BNC, 1.0 V _{p-p} /75 Ohm		
Bandwidth	12 MHz		
Color Signal Transmission Distance	Up to 1200 m (with passive transmitter) Up to 2400 m (with active transmitter)	Up to 2400 m (with active receiver)	Up to 1500 m
B/W Signal Transmission Distance	Up to 2000 m (with passive transmitter) Up to 3000 m (with active transmitter)	Up to 3000 m (with active receiver)	Up to 2400 m
Power Supply	12 VDC (PSU in-set included)		2 x 12 VDC (PSU in-set included)
Power Consumption	1.8 W	0.5 W	2 x 0.5 W
RS-485 Connector	N/A		Yes (up to 1200 m)
Dimensions (mm)	138 (L) x 77 (W) x 28 (H)	45 (L) x 49 (W) x 42 (H)	NVPT-111AVDT(T): 41 (L) x 43 (W) x 43 (H) NVPT-111AVDT(R): 41 (L) x 57 (W) x 43 (H)
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)		
Material	ABS (black)		
			


Model	NVPT-111VTS	NVPT-111VT	NVPT-111VTP	NVPT-414V
Device Type	Passive video transmitter/receiver			
Video Input/Output	1 x BNC, 1.0 V _{p-p} /75 Ohm			4 x BNC, 1.0 V _{p-p} /75 Ohm
Bandwidth	12 MHz			
Color Signal Transmission Distance	Up to 400 m Up to 1200 m (up to 1000 m for NVPT-111VTS) - with NVPT-A111VRH active receiver			
B/W Signal Transmission Distance	Up to 600 m Up to 2000 m (up to 1000 m for NVPT-111VTS) - with NVPT-A111VRH active receiver			
Dimensions (mm)	61 (L) x 19 (W) x 15.3 (H)	60 (L) x 20 (W) x 21 (H)	280 (L) x 20 (W) x 21 (H) with 23 cm coaxial cable	78 (L) x 110 (W) x 25 (H)
Weight	60 g	60 g	100 g	200 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)			
Material	ABS (black)			
				

Twisted-pair Signal Transmission

Model	NVPT-301SV
Device Type	Set (transmitter & receiver) for S-Video signal transmission
Data Input	S-Video (Mini-DIN 4 Pin "male" with 25 cm cable)
Data Output	RJ-45
Bandwidth	Up to 8 MHz
Transmission Distance	Up to 300 m
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	50 (L) x 23 (W) x 20 (H)
Weight	25 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)



Model	NVPT-501VGA
Device Type	Set (transmitter & receiver) for VGA signal transmission
Data Input	VGA (D-Sub 15 Pin)
Data Output	RJ-45
Resolution & Frequency Support	Max. 1600 x 1200, 85 Hz
Video Amplifier Bandwidth	150 MHz
Horizontal Frequency	30 ~ 95 kHz
Vertical Frequency	50 ~ 180 Hz
Transmission Distance	Up to 300 m
Power Supply	Transmitter: 5 VDC; Receiver: 5 VDC (PSUs in-set included)
Power Consumption	Transmitter: 2 W; Receiver: 1.5 W
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	Transmitter: 87 (L) x 67 (W) x 27 (H); Receiver: 140 (L) x 67 (W) x 27 (H)
Weight	Transmitter: 136 g; Receiver: 209 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)



Twisted-pair Signal Transmission

Model	NVPT-201KME
Device Type	Set (transmitter & receiver) for PC mouse & keyboard signals transmission
Connector	2 x PS2 (keyboard, PC mouse), RJ-45
Bandwidth	Up to 1 MHz
Signals Transmission	PC mouse & keyboard data and clock signals, power supply, ground
Transmission Distance	Up to 100 m
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	Transmitter: 70 (L) x 67 (W) x 27 (H); Receiver: 140 (L) x 25 (W) x 21 (H) with cable
Weight	Transmitter: 108 g; Receiver: 30 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)



Coaxial Signal Transmission

Model	NVCT-101AV
Device Type	Set (transmitter & receiver) for video & audio transmission
Video Input/Output	1 x BNC, 1.0 V _{p-p} /75 Ohm
Audio Input/Output	1 x RCA, 1.0 V _{p-p} /600 Ohm
Video & Audio Input/Output Type	Type F
Transmission Distance	Up to 400 m (RG59), 600 m (RG6)
Power Supply	Transmitter: 12 VDC; Receiver: 12 VDC (PSUs in-set included)
Power Consumption	Transmitter: 1.8 W; Receiver: 1.8 W
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	Transmitter: 91 (L) x 67 (W) x 27 (H); Receiver: 102 (L) x 67 (W) x 27 (H)
Weight	Transmitter: 147 g; Receiver: 166 g
Cable Type	Coaxial




Ground Loop Isolators

Model	NVG-002LIB	NVG-003TLIB
Device Type	Passive ground loop isolator with impedance adjustment for video transmission	Passive ground loop isolator with impedance adjustment and built-in transmitter (works with eg. NVPT-111VT as a receiver) for video transmission
Insertion Loss	0.5 dB	
Frequency	0-3 dB for 10 MHz	
Input Resistance	75 Ohm	
Output Resistance	75 Ohm	
Breakdown Voltage	600 VDC	
Transient Voltage	12 Vsk	
Impedance Adjustment	Yes	
Dimensions (mm)	84 (L) x 28 (W) x 21 (H) with 2 x 15 cm coaxial cable	69 (L) x 25 (W) x 22 (H)
Cable Type	Coaxial	CAT 5 UTP
Material	ABS (black)	




Surge Protectors

Model	NVS-001CB	NVS-003UR	NVS-005VD
Device Type	Passive surge protection device for video transmission		Passive surge protection device for video and data transmission
Surge Protection Time	Max. 1 ns	Max. 100 ns	
Protection Level	4 kV		
Surge Life	300 surges of 100 As		
Normal Resistance	10 000 MOhm		
Surge Resistance	Approx. 0 Ohm		
Bandwidth	0 ~ 1 GHz	0 ~ 10 MHz	
Insertion Loss	Less than 0.2 dB		
Connector	BNC	RJ-45	Screw terminal & BNC
Dimensions (mm)	78 (L) x 25 (W) x 25 (H)	85 (L) x 25 (W) x 25 (H)	87 (L) x 67 (W) x 27 (H)
Cable Type	Coaxial	CAT 5 UTP	Coaxial (video) & CAT 5 UTP (data)
			

Model	NVS-001PS	NVS-001PS/AC	NVS-003VPS	NVS-005VPSD
Device Type	Passive surge protection device for power supply		Passive surge protection device for power supply and video transmission	Passive surge protection device for power supply, video and data transmission
Voltage Range	0 ~ 40 VAC & 0 ~ 56 VDC	100 ~ 120 VAC & 220 ~ 240 VAC	0 ~ 40 VAC & 0 ~ 56 VDC	
Surge Protection Time	Max. 1 ns			
Protection Level	4 kV			
Surge Life	300 surges of 100 As			
Normal Resistance Across Coax	10 000 MOhm			
Surge Resistance	Approx. 0 Ohm			
Bandwidth	0 ~ 1 GHz			
Insertion Loss	Less than 0.2 dB			
Connector	Screw terminal		Screw terminal & BNC	
Dimensions (mm)	65 (L) x 25 (W) x 25 (H)		87 (L) x 67 (W) x 27 (H)	
				

Converters

Model	NV-001RSC	NV-001RSCI
Device Type	RS-232/RS-485 converter	
Data Input	RS-232 (D-Sub 9 Pin)	
Data Output	RS-485 (screw terminal)	
Protection	N/A	2.5 kV isolation of input and output circuits
Transmission Type	Half duplex, 2-wire, differential signals	
Transmission Distance	Up to 1200 m	
Operating Temperature	-10°C ~ 45°C	
Relative Humidity	0% ~ 95%	
Dimensions (mm)	73 (L) x 33 (W) x 16 (H)	
Weight	25 g	
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)	
		

Model	NV-101USBCI
Device Type	USB/RS-485 converter
Data Input	USB 2.0
Data Output	RS-485 (screw terminal)
Protection	3 kV isolation of input and output circuits
Transmission Type	Half duplex, differential signals
Transmission Distance	Up to 1200 m
Operating Temperature	0°C ~ 55°C
Relative Humidity	0% ~ 95%
Dimensions (mm)	25 (L) x 67.5 (W) x 25 (H)
Weight	65 g
Cable Recommended	CAT 5 UTP Cable (Ø=0.5 mm)
In Set Included	Main body, software drivers, USB cable for PC connection
	

CAMA-I Series Camera Housings

Model	NVH-SDHKIT	NVH-SD10I	NVH-SD40EH-C
Type	Adapter kit for suspended ceiling mount	Wall/in-ceiling mount indoor housing	Wall/in-ceiling mount outdoor housing
Construction Material	Plastic, steel	Aluminium, steel	Aluminium, steel
Housing Color	Black	Beige	Beige
Bubble	N/A	Acrylic, clear	Acrylic, clear
Heater	N/A	N/A	Yes
Fan	N/A	Yes	Yes
Degree of Protection	N/A	N/A	IP 66
Mount Type	Suspended ceiling mount	Wall or in-ceiling mount	Wall or in-ceiling mount
Power Supply	N/A	24 VAC	24 VAC
Power Consumption	-	6 W (Fan On)	Max. 53 W (Heater & Fan On)
Operating Temperature	N/A	N/A	-45°C ~ 50°C
Dimensions (mm)	130 (Ø) x 140 (H)	235 (Ø) x 320 (H)	234 (Ø) x 278 (H)
Weight	0.55 kg	3.6 kg	2.9 kg
In-set Included	N/A	Bracket for wall/in-ceiling mount	Sunshield
			

Speed Dome Mounting Accessories

<p>NVB-SD40CB In-ceiling mount aluminium bracket for NVH-SD40EH-C housing, load capacity 6 kg, length 400 mm</p>	
<p>NVB-SD40WB Wall mount aluminium bracket for NVH-SD40EH-C housing, load capacity 6 kg, dimensions: 288 mm x 140 mm</p>	
<p>NVB-SD40PWB/230 Wall mount aluminium bracket for NVH-SD40EH-C housing, load capacity 9 kg, dimensions: 270 mm x 194 mm, power supply: 230 VAC/24 VAC</p>	
<p>NVB-30CA Corner mount aluminium adapter for NVH-SD30EH and NVH-SD10I housings</p>	
<p>NVB-30PA Pole mount aluminium adapter for NVH-SD30EH and NVH-SD10I housings</p>	
<p>NVB-CM10C In-ceiling mount aluminium bracket for NVC-MSD10C CAMA-mini, load capacity 5 kg, length 394 mm</p>	
<p>NVB-CM10W Wall mount aluminium bracket for NVC-MSD10C CAMA-mini, load capacity 5 kg, dimensions: 260 mm x 205 mm</p>	

Camera Housings

Model	NVH-100H	NVH-150H	NVH-200H	NVH-250H	NVH-300H
Type	Outdoor camera housing	Outdoor camera housing	Outdoor camera housing with semi-cable-managed mounting bracket	Outdoor camera housing with fully-cable-managed mounting bracket	Outdoor camera housing with fully-cable-managed mounting bracket
Construction Material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Housing Color	Beige	Beige	White	White	White
Heater	Yes	Yes	Yes	Yes	Yes
Sun Protection	Sunshield	Sunshield	Shade	Shade	Sunshield
Degree of Protection	IP 66	IP 66	IP 66	IP 67	IP 67
Power Supply	12 VDC/24 VAC, 230 VAC	12 VDC/24 VAC, 230 VAC	230 VAC	230 VAC	230 VAC
Operating Temperature	-30°C ~ 50°C	-30°C ~ 50°C	-40°C ~ 50°C	-40°C ~ 50°C	-40°C ~ 50°C
External Dimensions (mm)	410 (L) x 113 (W) x 106 (H)	400 (L) x 140 (W) x 112 (H)	390 (L) x 114 (W) x 124 (H)	450 (L) x 135 (W) x 140 (H)	415 (L) x 150 (W) x 125 (H)
Camera Mount Dimensions (mm)	260 (L) x 76 (W) x 72 (H)	240 (L) x 100 (W) x 75 (H)	230 (L) x 90 (W) x 70 (H)	250 (L) x 105 (W) x 80 (H)	230 (L) x 100 (W) x 60 (H)
Weight	1.25 kg	1.4 kg	2.5 kg	3.65 kg	3 kg
In-set Included	Main body, L-wrench, mounting screws	Main body, mounting screws	Main body, bracket, L-wrench, mounting screws	Main body, bracket, L-wrench, mounting screws	Main body, bracket, L-wrench, mounting screws
					

Camera Mounting Accessories

<p>NVB-02B Plastic camera bracket, load capacity 3 kg, length 125 mm</p>	
<p>NVB-03B Plastic camera bracket, load capacity 3 kg, length 145 mm</p>	
<p>NVB-09DB WHITE, NVB-09DB BLACK Plastic mini-dome camera bracket, wall mount, load capacity 3 kg, length 126 mm, color: black or white</p>	
<p>NVB-15DB Wall mount aluminium bracket for NVC-HC400VP & NVC-HDN400VP Series vandal proof cameras and NVC-HC220DVF dome camera, outdoor, load capacity 15 kg, dimensions: 294 mm x 156 mm</p>	
<p>NVB-100B Aluminium bracket for NVH-100H and NVH-150H Series aluminium housings, load capacity 15 kg, length 226 mm</p>	

Accessories

Dummies	NVD-10B Mini-dome dummy camera, black, diameter 100 mm	
	NVD-10W Mini-dome dummy camera, white, diameter 100 mm	
	NVD-100B Dome dummy camera, black, diameter 113 mm	
	NVD-100W Dome dummy camera, white, diameter 113 mm	
Others	NV-RC370 Remote control for NVC-HC370HZZL-2 & NVC-HDN370HZZL-2 All-In-One	
	NV-001MIC High sensitivity microphone: <ul style="list-style-type: none"> • Audio output: 1 x RCA, max. 2.0 V_{p-p} • Bandwidth: 20 Hz ~ 16 kHz • Output impedance: 10 kOhm • S/N ratio: more than 60 dB • 45 cm power/audio cable • Power supply: 12 VDC • Power consumption: 120 mW • Operating temperature: -10°C ~ 45°C • Dimensions (mm): 14 (Ø) x 500 (L) with 45 cm cable • Weight: 35 g 	
	NV-DVR1104/CD VGA CARD VGA module for NV-DVR1104/CD: <ul style="list-style-type: none"> • Monitor output: 1 x VGA • Resolution modes: 640x480, 800x600, 1024x768, 1280x1024 • Frequency modes: 56 Hz, 60 Hz, 70 Hz, 75 Hz 	
	NV-DVR1108/1116/CD VGA CARD VGA module for NV-DVR1108/CD i NV-DVR1116/CD: <ul style="list-style-type: none"> • Monitor output: 1 x VGA • Resolution modes: 640x480, 800x600, 1024x768, 1280x1024 • Frequency modes: 56 Hz, 60 Hz, 70 Hz, 75 Hz 	

System overview

Video capture cards

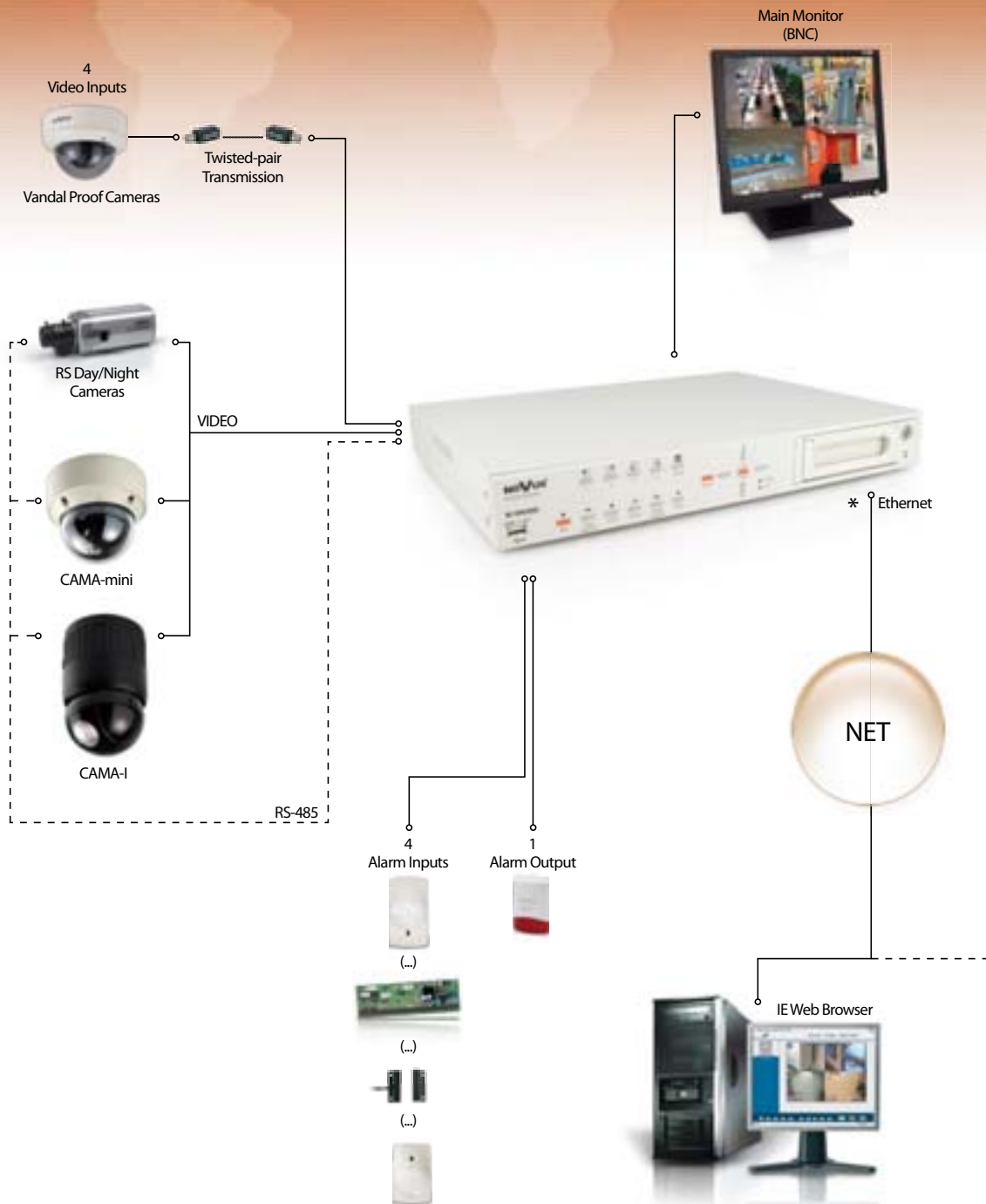


System overview NV-DVR1004 LITE



System overview

NV-DVR1004, NV-DVR1004NET



* Network connection only for NV-DVR1004NET

System overview NV-DVR404/CD



System overview

NV-DVR1104/CD, NV-DVR1108/CD,
NV-DVR1116/CD



* S-Video and spot monitor outputs only for NV-DVR1108/CD and NV-DVR1116/CD

System overview NV-DVR3009, NV-DVR3016



System overview NV-DVR5004



System overview

NV-DVR5009/CD, NV-DVR5016/CD



System overview

NV-DVR5108/DVD, NV-DVR5116/DVD



System overview

NV-DVR5508/DVD, NV-DVR5516/DVD



System overview

NV-DVR5816/DVD



NOVUS® products are manufactured with attention to quality and handling comfort, but also with great care for the safety of their users. For this reason each component of NOVUS® CCTV systems meets the stringent norms applicable in the European Union (CE, WEEE, RoHS), as well as on the territory of the Russian Federation (GOST-R).



European certificate of conformity (CE) guarantees that all NOVUS® products fulfill the demanding safety and quality regulations binding for electric and electronic equipment in United Europe.



NOVUS® products have been designed and constructed in compliance with the RoHS (2002/95/EC) directive limiting the use of hazardous substances in electric and electronic equipment. Completed tests guarantee that the appliances do not contain such substances in quantities that could negatively influence human health or natural environment.



The GOST-R certificate of conformity denotes that NOVUS® products meet the safety and quality norms and standards legally required in the Russian Federation.



NOVUS® products are marked according to the WEEE (2002/96/EC) directive pertaining to handling of waste electric and electronic equipment and, consequently, may not be treated as household waste. Their recycling should be completed by specialized recycling centers. Correct disposal of waste electric and electronic equipment helps protect the natural environment and human health.

