

# DDH-3532-212N00 Recorder 16ch IP/ 16ch AN 1x2TB

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**BOSCH**

Invented for life



- ▶ Hybrid recording of up to 16 IP and 16 analog channels
- ▶ Compact, sturdy and stylish design
- ▶ 12 MP IP camera support for view and playback
- ▶ Separate internet and IP camera networks

## Certifications and approvals

### Standards

Alarm	EN 50130-5:2011, Alarm systems - Part 5: Environmental test methods, Class I, Fixed equipment
Lightning protection	To ALL long input / output - and supply-wiring. Alarm inputs and relay output, Video inputs and Outputs, dome-control outputs, power-cable, Audio In/Out. ± 0.5, 1kV line to line, ± 0.5, 1 and 2kV line to earth

### EMC + Safety - Europe

EU Directives	2014/35/EU (LVD), 2014/30/EU (EMC), 2011/65/EU (RoHS)
EMC Emission	EN 55032:2012/AC2013, class B
EMC Immunity	EN 50130-4:2011/A1:2014
EMC mains Harmonics	EN 61000-3-2:2014
EMC Mains fluctuations	EN 61000-3-3:2013

### EMC + Safety - Europe

LVD Safety	CB scheme + IEC/EN/UL 62368-1:2014/AC:2015
RoHS	EN 50581:2012

### EMC + Safety - USA and Canada

EMC USA	47CFR part 15 (FCC), Class B
Safety USA (UL, cUL)	UL 62368-1, Edition 2, Dec 1, 2014
Safety Canada	CAN/CSA-C22.2 No. 62368-1

### India

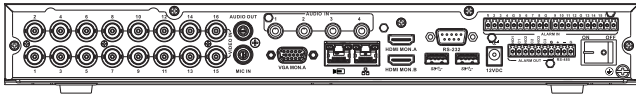
BIS (Bureau of Indian Standards)	BIS registration for external Power adapter (comes / packed with the main product)
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### Australia

ACMA EMC	RCM logo on product label
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Region	Regulatory compliance/quality marks	
Australia	RCM	DOC SAL hybrid 3000
	RCM	DOC SAL Variant hybrid 3000
Europe	CE	ST-VS 2016-E-087
USA	UL	FCC & UL
	FCC	ST-VS 2016-E-088

### Installation/configuration notes



<b>VIDEO IN</b>	16 BNC for connecting max. 16 analog cameras
	Max. 16 IP cameras connected via external switch (if no analog cameras are connected, an extra 16 IP cameras can be connected)
	RJ45 Ethernet connection (10/100/1000Base-T according to IEEE802.3)
<b>VGA MON.A</b>	1 D-SUB (Monitor output)
<b>HDMI MON.A</b>	1 HDMI (Monitor output)
<b>HDMI MON.B</b>	1 HDMI (output for spot monitor)
<b>ALARM IN</b>	16 screw terminal inputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>ALARM OUT</b>	3 screw terminal outputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>AUDIO IN</b>	4 RCA (Audio inputs)
<b>AUDIO OUT</b>	1 RCA (Audio output)
<b>MIC IN</b>	1 RCA (Audio input)
<b>RS-485</b>	Screw terminal output (Dome control)
<b>RS-232</b>	DB9 male, 9-pin D-type (Dome control)
	One front (2.0) and two rear (3.0) USB connectors for mouse or USB memory device
Power input with On/Off switch	12 VDC (5 A) AC input adapter: 100~240 VAC, 50-60 Hz, 1.5 A
	Ground connection

### Parts included

Quantity	Component
1	Recorder
1	Optical disc containing software licenses and user documentation
2	Power supply cables (120VAC US type; 230VAC Euro type)
1	External power supply adapter (only for non-PoE models)
	Terminal connector blocks
1	Hard disk mounting kit (including SATA cables, brackets and screws)
1	Optical USB mouse
1	IR remote Control with 2 AA (1.5 V) batteries
1	Ground screw
	Installation guides for Recorder, HDD, plus safety instructions

### Technical specifications

#### Mechanical

Dimensions (WxDxH) 375 x 323 x 53 mm (14.8 x 12.7 x 2.1 in)

Weight (excluding HDD(s) and DVD) 4.13 kg (9.1 lb) approx.

#### Power

External power adapter AC input 100–240 VAC; 50-60 Hz; 1.5 A

Power adapter DC output 12 VDC; 5 A

RTC battery on main PCB Lithium CR2032, 3 VDC

Maximum power consumption (no HDD) 20 W

#### Environmental

Operating temperature (incl. HDD(s) and DVD) +0°C to +40°C (+32°F to +104°F)

Storage temperature -40°C to +70°C (-40°F to +158°F)

Operating humidity <93% non-condensing

Storage humidity <95% non-condensing

Video storage	
Internal storage options	Max. 2 SATA HDD or 1 SATA HDD + 1 DVD (R/RW) Max. capacity per HDD: 6 TB Max. supported speed per HDD: 6 Gb/s
Alarms and detections	
Motion detection set by camera	Essential or Intelligent Video Analytics (IVA), Motion +
Alarm activations	Video loss, motion detection, input alarm, system alarm
Events triggered by alarm	Recording, PTZ movement, alarm out, email, buzzer, screen message, Mon A and B activated, mobile push notification
Inputs	16 inputs configurable NO/NC, max. input voltage 12 VDC +/-10%
Outputs	5 relay outputs, 1 open collector
Relay contact	Max. rated, 30 VDC, 2 A continuous or 125 VAC, 1 A (activated)
Exporting	
DVD (optional)	Built-in DVD+R/RW writer
USB	Flash memory or external HDD (FAT32)
Network	Web Client software or Video Client
Playback	
Multi-channel	Simultaneous 1/4/9/16 channels
Mode	Forward, reverse, slow play, fast play, frame-by-frame
Search	Time, channel, type, smart
Network	Video Client, Web client, App
Restrict	Restrict video by user rights for viewing
Protection	Protect video against overwriting
Retention time	Automatically delete recordings after 1 to 365 days
Recording	
Decoding compression	H.265/H.264/MJPEG
Speed	Max. 60 IPS per channel, configurable
Bit rate	16 kbps to 24 Mbps per channel
Record interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
Mode	Manual, Scheduled (regular, motion detection, alarm), Stop

Network control	
Ethernet	RJ45 port (10/100/1000 Mbps)
PC software	Video Client, Web client
APPS	iPhone, Android
User access	Maximum 128 users. Bosch advises a maximum of 4 simultaneous connections. More connections can cause performance limitations.
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS/DDNS, IP Filter, PPPoE, FTP
Video performance	
Maximum camera inputs	16 analog + 16 IP or 32 IP
Maximum incoming bandwidth	320 Mbps
Maximum recording bandwidth	256 Mbps
Maximum transmission bandwidth	128 Mbps
Resolution IP camera	12MP, 8MP, 6MP, 5MP, 3MP, 1.3MP, 1080p, 720p
Resolution analogue camera	960H, D1, HD1, CIF, QCIF
Display	
Resolution IP camera	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768
Resolution analogue PAL	970x576, 704x576, 352x576, 352x288, 176x144
Resolution analogue NTSC	960x480, 704x480, 352x480, 352x240, 176x120
OSD	Camera title, Time, Video loss, Motion detection, Recording, PTZ
Audio	
Input	4 channel (via RCA) 200 to 3000 mV, 10 kOhm
MIC Input	1 channel (via RCA) 200 to 3000 mV, 10 kOhm
Output	1 channel (via RCA) 200 to 3000 mV, 5 kOhm
Direction	Bidirectional (audio input and output connected via device)

## Ordering information

**DDH-3532-212N00 Recorder 16ch IP/16ch AN 1x2TB**  
High-resolution recorder for IP and analog surveillance systems.

Combination of up to 16 IP and 16 analog camera channels.

1 HDD (2 TB)

Order number **DDH-3532-212N00**

### Accessories

#### **DVR-XS200-A HDD expansion 2TB**

Storage expansion kit. 2 TB

Order number **DVR-XS200-A**

#### **DVR-XS300-A HDD expansion 3TB**

Storage expansion kit. 3 TB

Order number **DVR-XS300-A**

#### **DVR-XS400-A HDD expansion 4TB**

Storage expansion kit. 4 TB

Order number **DVR-XS400-A**

#### **DVR-XS600-A HDD expansion 6TB**

Storage expansion kit. 6 TB

Order number **DVR-XS600-A**

#### **DVR-XS-DVD-B DVD writer expansion B**

DVD writer Expansion kit B

Order number **DVR-XS-DVD-B**

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