

DRH-5532-414N00 Recorder 16ch IP/ 16ch AN 1.5U 1x4TB

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BOSCH
Invented for life



- ▶ Hybrid recording of up to 16 IP and 16 analog channels
- ▶ Extended rack-mount unit with advanced connections
- ▶ 12 MP IP camera support for view and playback
- ▶ Separate internet and IP camera networks
- ▶ RAID 1 and 5 support

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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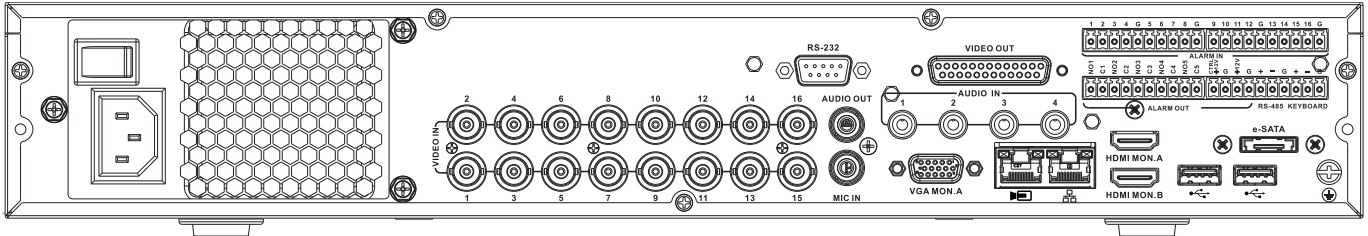
Australia

ACMA EMC	RCM logo on product label
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Region	Regulatory compliance/quality marks	
Australia	RCM	DOC SAL hybrid 5000
	RCM	DOC SAL Variant hybrid 5000
Europe	CE	ST-VS 2016-E-087

Region	Regulatory compliance/quality marks	
USA	UL	FCC & UL
	FCC	ST-VS 2016-E-088

Installation/configuration notes



VIDEO IN	16 BNC for connecting max. 16 analog cameras
	Max. 16 IP cameras connected with 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)
VGA MON.A	1 D-SUB (Monitor output)
HDMI MON.A	1 HDMI (Monitor output)
HDMI MON.B	1 HDMI (output for spot monitor that supports live multiscreen)
ALARM IN	16 screw terminal inputs, cable diameter AWG26-16 (0.4–1.29 mm)
ALARM OUT	6 screw terminal outputs, cable diameter AWG26-16 (0.4–1.29 mm)
AUDIO IN	4 RCA (Audio inputs)
AUDIO OUT	1 RCA (Audio output)
MIC IN	1 RCA (Audio input)
RS-485	Screw terminal output (Dome control)
KEYBOARD	Screw terminal output (Keyboard)
VIDEO OUT	D-sub (loop through to other devices)
RS-232	DB9 male, 9-pin D-type (Dome control)
	Two USB (3.0) connectors for mouse or USB memory device; one USB (2.0) also on front panel
eSATA	For backup/memory device
Power input with On/Off switch	100~240 VAC, 50-60 Hz, 1.9 A, 75 W
	Ground connection

Parts included

Quantity	Component
1	Recorder
1	CD-ROM containing software licenses and user documentation
2	Power supply cables (120VAC US type; 230VAC Euro type)
	Terminal connector blocks
1	Hard disk mounting kit (including SATA cables, brackets and screws)
1	Optical USB mouse
1	19" mounting set (including brackets and screws)
1	IR remote Control with 2 AA (1.5 V) batteries
1	Ground screw
1	Keyboard cable
1	Loophrough cable
	Installation guides for Recorder, HDD, plus safety instructions

Technical specifications

Mechanical	
Dimensions (WxDxH)	440 x 408 x 76 mm (17.3 x 16.1 x 3.0 in)
Weight (excluding HDD(s) and DVD)	6.67 kg (14.7 lb) approx.
Power	
AC input	100-240 VAC; 50-60 Hz; 1.9 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 (option)	Max. 4 SATA HDD or 2 SATA HDD + 1 DVD (R/RW) Max. capacity per HDD: 6 TB Max. supported speed per HDD: 6 Gb/s
External (option)	eSATA-connected storage device
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

Playback	
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

DRH-5532-414N00 Recorder 16ch IP/16ch AN 1.5U 1x4TB

High-resolution recorder for IP and analog surveillance systems.

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

1 HDD (4 TB)

Order number **DRH-5532-414N00**

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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