# **VIDEOJET decoder 3000**

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- ► HD 1080p30/i60 or 720p60 decoding in single view
- ▶ Quad-view option for SD video up to 960H
- ▶ HDMI or composite video output
- ▶ Bi-directional audio and keyboard support
- ► Alarm inputs and relay output

VIDEOJET decoder 3000 displays H.264 encoded video at up to 60 images per second from PAL, NTSC, or HD sources over IP networks.

Establish the video connections automatically from the camera, encoder, decoder, or Bosch's comprehensive video management system. VIDEOJET decoder 3000 is capable of decoding a single HD video stream, or up to four SD video streams at the same time in quad-mode. Control the viewing mode remotely via a management system. It can drive an HD monitor via HDMI directly, thus is ideally suited for applications like flat-screen monitor walls. Alternatively, it can connect to an analogue monitor using its composite video BNC output.

VIDEOJET decoder 3000 provides one-channel bidirectional audio communication in parallel to video. Ultra-compact in size, VIDEOJET decoder 3000 is perfect for any application that depends on space-saving solutions.

#### **Functions**

#### **Access security**

VIDEOJET decoder 3000 offers various security levels for accessing the network, the unit, and the data channels. As well as password protection with two levels, it supports 802.1x authentication using a RADIUS server for identification.

Also the communication channels—video, audio, or serial I/O—are then AES encrypted.

#### **High performance**

Transmit IP video to a high-performance VIDEOJET decoder 3000 and present it with ultimate clarity on an analog CCTV monitor or on a large, flat-screen display.

VIDEOJET decoder 3000 can handle up to four SD H. 264 video streams with full resolution and frame rate and display them in quad-view. When in single-view, it can display an HD video stream up to 1080p30 or 720p60.

#### **Flexibility**

With its connection page in the web browser, the optional IP Matrix license, the support of IntuiKey keyboard and integration into Video Clients and Video Management Systems, VIDEOJET decoder 3000 enables solutions in varieties from the smallest standalone up to large or distributed but centrally controlled applications.

#### **Keyboard support**

VIDEOJET decoder 3000 allows direct connection of an IntuiKey keyboard to its serial interface. Controlled by and communicating to a video management system this allows to set up PC-less operator desks, ideal for remote locations like doorman's offices.

# **IP Matrix system**

IP Matrix can be used to control IP-based monitoring systems of up to 32 cameras and up to ten monitors via an IntuiKey keyboard without the use of a computer. In normal operation, the system works only via the network connections between IP cameras, encoders and decoders, controlled via the IntuiKey. As part of a larger CCTV system, IP Matrix can be used as a satellite system. The higher-ranking system can access IP Matrix for control purposes.

Otherwise, IP Matrix works independently and is completely self-sufficient.

#### Easy upgrade

Remotely upgrade the decoder whenever new firmware or software becomes available. This ensures up-to-date products, thus protecting investment with little effort.

#### **Decoding performance**

Encoding	Streams	Resolution	Max. bit rate
H.264 HD	1	1080p30	10 Mbps
H.264 HD	1	1080i60	10 Mbps
H.264 HD	1	720p60	10 Mbps
H.264 SD	4	960H/4CIF/ 432p	6 Mbps

# **Certifications and approvals**

## Safety

Region	Number
	IEC 60950-1

## **System**

Region	Number
	IEC 62676-2
	EN 50132-5-2

#### **Electromagnetic compatibility**

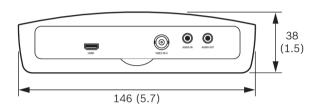
Region	Number
EU	EN 55022 ITE
	EN 55024 ITE
	EN 61000-3-2
	EN 61000-3-3
	EN 50130-4 Alarm systems
	EN 50121-4 Railway
AUS/NZ	AS/NZS 3548 Class B
US	FCC 47 CFR Part 15 Subpart B Class B

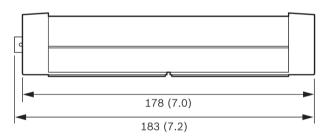
#### **Approvals**

Region	Certification	
Europe	CE	VIDEOJET decoder 3000
USA	UL	VIDEOJET decoder 3000
	UL	Bosch UL online certifications directory (link)

#### Installation/configuration notes

#### **Dimensions (front view / side view)**





Dimensions in mm (in)

#### Front connectors and indicators



VIDEOJET decoder 3000 front view

1 HDMI OUT 3 AUDIO IN
2 VIDEO OUT 4 AUDIO OUT

### Rear connectors and indicators



VIDEOJET decoder 3000 rear view

1 10/100 Base-T Fast Ethernet

5 LED **DISPLAY** 

2 LED LINK

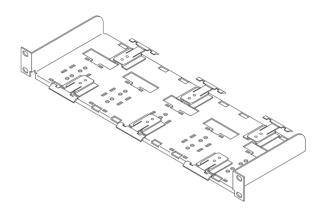
6 Alarm in, relay out, COM (RS-232/422/485)

3 LED CONNECT

7 Power **12 VDC** 

4 Factory reset button

# Rack Mount Kit XF (optional)



# Parts included

Quantity	Component
1	VIDEOJET decoder 3000
1	Quick Installation Guide
1	Safety Hints document
1	Power supply unit with 3 primary adapters (EU, US, UK)
1	Set of spring clamp contact connectors, wall mount and desktop accessories

# Technical specifications

Input/output	
Digital video	1 x output
• standard	HDMI 1.4b
• video modes	PAL, 704 x 576i @ 50 Hz NTSC, 704 x 480i @ 59.97 Hz 960H25, 960 x 576i @ 50 Hz 960H30, 960 x 480i @ 59.97 Hz 720p50, 1280 x 720p @ 50 Hz 720p60, 1280 x 720p @ 60 Hz 1080i50, 1920 x 1080i @ 50 Hz 1080i60, 1920 x 1080i @ 60 Hz 1080p25, 1920 x 1080p @ 25 Hz 1080p30, 1920 x 1080p @ 30 Hz
<ul> <li>connector</li> </ul>	Type A
• cable length	30 m (98.43 ft) max
Composite video	1 x output
• connector	BNC
• impedance	75 ohm
• signal	Analog composite, 1 Vpp, NTSC or PAL

Input/output	
• cable length	30 m (98.43 ft) max
Audio	1 x bidirectional
<ul> <li>connector</li> </ul>	2 x 3.5 mm stereo jack
• signal line in	9 kohm typical, 5.5 Vpp max
• signal line out	$3.0\mathrm{Vpp}$ at $10\mathrm{kohm}/1.7\mathrm{Vpp}$ at $16\mathrm{ohm}$ typical
Alarm	4 x input
<ul> <li>connector</li> </ul>	Clamp (non-isolated closing contact)
<ul> <li>activation resistance</li> </ul>	10 ohm max
Relay	1 x output
• connector	Clamp
• signal	30 Vpp (SELV), 200 mA
COM port	Clamp, RS-232/422/485, bidirectional
Video	
Standards	H.264 High Profile, H.264 Main Profile, H.264 Baseline Profile (ISO/IEC 14496-10) M-JPEG, JPEG
Data rates	9.6 kbps to 10 Mbps per channel
Total delay	300 ms max
Frame rate	1 to 25/30 (PAL/NTSC) 1 to 50/60 (HDMI)
Audio	
G.711	
Frequency range	300 Hz to 3.4 kHz
• Data rate	80 kbps at 8 kHz sampling rate
L16 (reception only)	
Frequency range	300 Hz to 6.4 kHz
• Data rate	640 kbps at 16 kHz sampling rate

Signal-to-noise ratio

> 50 dB

Network	
Ethernet	10/100 Base-T, auto-sensing, half/full duplex, RJ45
Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/ RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, Telnet, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, digest authentication
Encryption	TLS 1.0, SSL, DES, 3DES, AES
Control	
Software update	Flash ROM, remote programmable
Configuration	Configuration Manager or Web browser
Electrical	
Power supply	Via external unit
Input voltage	12 VDC
Input current	0.75 A
Power consumption	Approx. 9 W
Mechanical	
Dimensions (H x W x D)	38 x 146 x 183 mm (1.5 x 5.7 x 7.2 in)
Weight	Approx. 0.6 kg (1.3 lb)
Environmental	
Operating temperature	
	0°C to +50°C (+32°F to +122°F) ambient temperature
temperature	,
• Decoder	temperature $0 ^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ (+32 $^{\circ}\text{F}$ to +104 $^{\circ}\text{F}$ ) ambient
Decoder     Power supply	temperature $0 ^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ (+32 $^{\circ}\text{F}$ to +104 $^{\circ}\text{F}$ ) ambient
Decoder     Power supply  Relative humidity	temperature  0 °C to +40 °C (+32 °F to +104 °F) ambient temperature  0 to 90% atmospheric humidity, non-

#### Note:

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

#### **Ordering information**

# **VIDEOJET decoder 3000**

High-performance video decoder. Single- or quad-view; H.264 up to 1080p; JPEG; G.711 audio; 60 IPS; analog and HDMI outputs
Order number **VJD-3000** 

#### Accessories

#### Rack Mount Kit XF

Rack mount kit for stand-alone encoders and decoders Order number VIP-VJTXF-RMK

UML-273-90 27-inch High Performance HD LED Monitor High-performance HD LED 27-inch monitor. 1920x1080p; 300 cd/m2; audio; BNC/HDMI/ Component/DVI-D/VGA inputs; backlight 30,000 hours; viewing angle (HxW) 178x178; contrast 3000:1 Order number UML-273-90

UML-323-90 32-inch High Performance HD LED Monitor High-performance HD LED 32-inch monitor. 1920x1080p; 350 cd/m2; audio; BNC/HDMI/ Composite/DVI-D/VGA inputs; backlight 50,000 hours; viewing angle (HxW) 178x178; contrast 3000:1 Order number UML-323-90

UML-423-90 42-inch High Performance HD LED Monitor High-performance HD LED 42-inch monitor. 1920x1080p; 500 cd/m2; BNC/HDMI/DVI-D/VGA inputs; backlight 50,000 hours; viewing angle (HxW) 178x178; contrast 4000:1 Order number UML-423-90

UML-553-90 55-inch High Performance HD LED Monitor High-performance HD LED 55-inch monitor. 1920x1080p; 450 cd/m2; audio; BNC/HDMI/DVI-D/VGA inputs; backlight 50,000 hours; viewing angle (HxW) 178x178; contrast 4000:1 Order number UML-553-90

#### **Software Options**

#### **IP Matrix**

IP Matrix license for decoders to set up an IP-based CCTV surveillance system without PC operation. 32 cameras; 10 monitors; controlled via IntuiKey keyboard Order number MVC-FIPM