IFOTEC

HXQ-8V2D-VB series

- **8 unidirectional video channels**
- **2 bi-directional data channel**
- **Alarm signal via contact terminal**

Rack-mount housing
14 TE

Stand alone housing

Stand alone housing back panel

DESCRIPTION :

HXQ-8V2D-VB series are especially designed to transmit all video and data signals that are necessary for a correct use of 2 PTZ or fixed cameras and domes.
The HXQE-8V2D transmitter muxes four video, two identical bi-bidirectional data and one contact terminal alarm over one optical fibre.
The receiver HXQR-8V2D-VB demuxes these signals.

HXQ modules enable digital transmission of 8-bit encoded video.
The module has been specifically designed for:
- **Transport Infrastructures**
- **Industrial or hazardous sites**

This equipment is completely transparent and sends all video signal types (NTSC, PAL or SECAM) and their associated control system (RS232 and RS485, 2 or 4 wires). **Data configuration is executable or modifiable directly on modules by the user, thanks to a switch on the back panel.**
In default, data is configured in our premises in RS485 4 wires.

This equipment is available in stand alone housing or in rack-mount housing (14TE) fully compatible with 19''3U rack and upon request in 19''1U rack version.
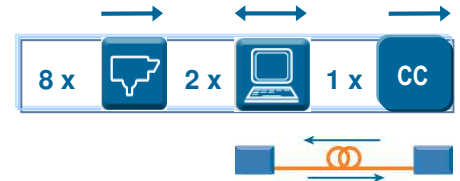
Upon request :
Supervision of modules by the back panel of 19''3U rack and by the IFOTEC rack-mount housing of supervision
Use of CWDM lasers according to the ITU grid allowing
- Insertion on the network until 8 video data equipment
- Signals multiplexing with other applications (data, audio, Ethernet...).

FUNCTION

- Video and data transmission over one optical fibre up to 50 km, even in an electronically disturbed environment.

KEY FEATURES

- 8-bit Digital Video.

- Point to point connection over 1 optical fibre for unidirectional video signals and two-way data.

- Transmission distance up to **50 km** over singlemode fibre (for longer distance, please consult us)

- Transmission distance up to **1 km** over multimode fibre **(5 km over high performance fibre)**

- One unidirectional contact terminal for the alarm signal transmission (video direction).

- Simplified wiring: Data paralleling by the 3U rack back panel.

- Data port protection :
- 30 KV ESD and 3 KV surge protection.

- A circuit allows to compensate automatically for the cables losses in entry of optical transmitters.

- DIN rail mounting (option)

Place of production and after sales service: Voiron (France)
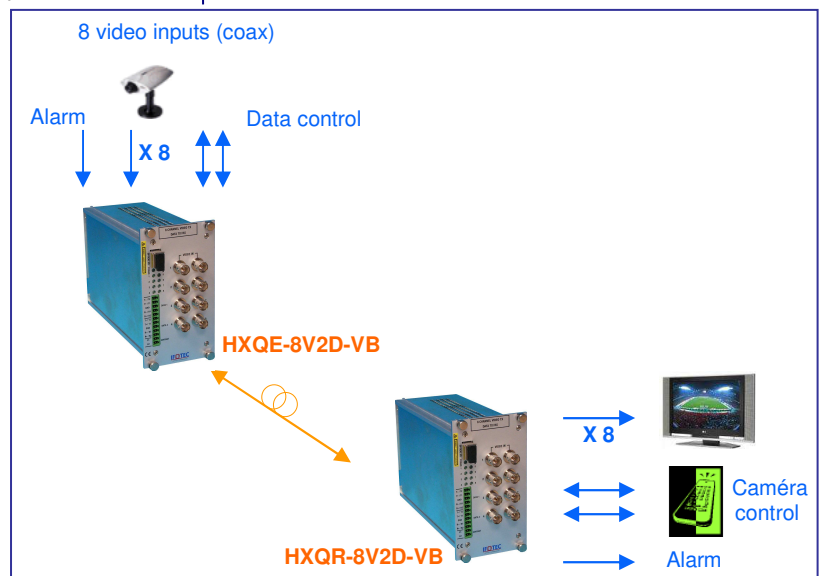
Product warranty : 3 years

8 video inputs (coax)

Alarm   Data control

X 8

HXQE-8V2D-VB

HXQR-8V2D-VB

X 8

Caméra control

Alarm

Signal specifications

VIDEO		DATA	
Number of channels	8 unidirectional channels	Number of channels	2 identical bi-directional data
Signal type	pal, secam, NTSC …	Signal type	RS232, RS485 2 fils or 4 fils
Digitisation	8 bits	Data Format	NRZ, NRZI, Manchester, Bi-phase
Input/output video level	1 V C to C	Rate	DC - 115.2 kbps
Input/output impedance	75 Ω	Operating mode	half-duplex or full-duplex
Signal/noise ratio	> 70 dB	Configuration	By DIP switch on back side
Bandwidth	6.5 MHz	Protection	30 KV ESD, 3 KV surge protection,
Differential phase	< 2 °		EN 61000-4-5
Differential gain	< 2 % typ.		

Contact closure

TRANSMITTER : INPUT		RECEIVER : RELAY	
Number of channel	1 unidirectional channel (video direct.)	Contact	NO/NF/Common*
Signal type	Contact closure	Contact resistance	200 mΩ
Open voltage	3.3 VDC	Max voltage (open contact)	48 VDC
Activation	Ground	Max current (closed contact)	< 200 mA
Max current	5 mA		
		*Normally Open / Normally Closed / Common	

Optical specifications

Fibre	Série	Optical budget max	Distance*
µm		dB	km
Multimode (62.5/125)	Standard	13	1**
Monomode (9/125)	Standard	13	35
	Extended	19	50

*Can change with the fibre type and the network, distance may also be limited because of the bandwidth
** Distance for a multimode fibre of bandwidth >500Mhzxkm @1310nm. Up to 5Km over high performance fibre (BP>2.5GHzxkm)

Indicators

Multiplexer	Demulitplexer
▪ video : video presence (8)	▪ video : video presence (8
▪ data : Tx/RX data traffic (2)	▪ data : Tx/RX data traffic (2)
▪ laser on : optical emission	▪ laser on : optical emission
▪ error : transmission error	▪ error : transmission error

Connectors / Power supply

Connectors	Power supply
Optical connector : LC/PC	Power connector :
Video connector : BNC	Power supply 9-36 VDC : screw terminal block
Data connector : screw terminal blocks	Power consumption : 660mA @ 12 VDC
Contact closure connector : screw terminal blocks	Power supply 230 VAC : external power converter 230 VAC-12 VDC, ref. FCAS 210 100

Housing / Environment

Housing	Environment
Stand alone housing (L x w x h) : 167 x 125 x 45 mm	Operating temperature :
DIN rail mounting : : kit of mounting ref. KIT-RD-003	- Stand alone housing : -10 ; + 60°C
Rack-mount housing : 14 TE	- Rack-mount housing : -10; + 50°C (+60°C under conditions)
19''1U rack : Please contact us	Storage temperature : - 40 ; + 85°C
	Relative humidity : 0 to 85 % (non condensing)
	- Conformal coating option : 0 to 95%. Please add the suffix -C in the end of codification

PART NUMBERS :

Housing type		Power supply	Applications	Connection
Video multiplexer	video demultiplexer			
Stand alone housing				
HXQE 334 36A-8V2D-VB	HXQR 534 36A-8V2D-VB	9-36 VDC	Multimode up to 1 km	LC/PC
HXQE 33L 36A-8V2D-VB	HXQR 53L 36A-8V2D-VB	9-36 VDC	Singlemode up to 35 km	LC/PC
HXQE 23L 36A-8V2D-VB	HXQR 43L 36A-8V2D-VB	9-36 VDC	Singlemode up to 50 km	LC/PC
Rack-mount housing 14 TE				
HXQE 344 30A-8V2D-VB	HXQR 544 30A-8V2D-VB	Rack 19'' 3 U	Multimode up to 1 km	LC/PC
HXQE 34L 30A-8V2D-VB	HXQR 54L 30A-8V2D-VB	Rack 19'' 3 U	Singlemode up to 35 km	LC/PC
HXQE 24L 30A-8V2D-VB	HXQR 44L 30A-8V2D-VB	Rack 19'' 3 U	Singlemode up to 50 km	LC/PC

In line with the company policy of continuous improvement, product specifications are subject to change without prior notice