

FVC-401 (402)

4 Video + 1 (2) Data Fiber Converter

Description:

The videoconverters of FVC-401 series are subjected to digital 4-channel video with data, which could be compatible with the all-pattern video signal and transmit 4-ch video signal and 1-ch reversed data at same orientation on an optical fiber. The video signal adopted 10 bit/15.36 MHz digital sample technique. In additional, the data interface sustains electrical standard, RS232/RS422/RS485 and the baud rate is limited in 0-300 kbps. For obtaining the high quality transmission, the system use the full digital transmission channel. Power, optical, data and video are easily inspected the indicators on the panels, so that the user could check the status visibly. The system series are high performance and reliability transmission system for long distance of video and data.



Features:

- Digital video transmission
- 4 video + 1-2 data channels over single fiber
- High speed digital transmission technology
- Wide optical dynamic range, no user adjustments
- FC optical connector
- Video DC Restoration
- Immunity to electrical interference, ground loops and radio frequency interference
- Transmission distance up to 80 km for SM fiber

Video specifications:

Video channel	2 - 4 ch
Video bandwidth	6.5 MHz
Differential gain	1%
Differential phase	0.7° typ.
Video format	PAL, NTSC, SECAM
SNR	> 70 dB
Input/Output Impedance	75 Ω (unbalanced), BNC
Input/Output voltage	1.0 V _{pp} (typical)
Video coding	10 bit digital coding

Data specifications:

Data channel	4 ch (reversed) RS232/RS422/RS485 (selectable)
Data interface	RJ-45
Data rate	0-300 kbps
BER	< 10 ⁻⁹

Optical specifications:

Working wavelengths	1310/1550 nm
Transmission range	20 – 80 km
Optical interface	FC/PC

Physical specifications:

Temperature Operating	0°C to 50°C
Storage	-40°C to 85°C
Operating Humidity	5 - 95% (non-condensing)
External Power Supplier	110 – 240 V, 50/60 Hz
Power Consumption	1.0 A @ 6.5 VDC
Indicators:	Power Supply, FO signal, Data signal
Dimensions:	200 x 137 x 40 mm (W x D x H)
Weight:	0.5 kg
MTBF (Mean Time Between Failures)	>100 000 hrs

Application:

- Closed circuit television supervisory system
- Remote TV teaching system

Ordering code:

Model ¹	Video		Optical Interface ²		Box	
				Distance		
FVC-401	T	video TX	20	20 km	DC	stand alone, DC power
FVC-402	R	video RX	40	40 km	CC	chassis card
			60	60 km		
			80	80 km		

- Note:
- 1) FVC-401 4 video, 1 data channel
FVC-402 4 video, 2 data channels
 - 2) Fiber optic interface – FC connector
 - 3) Data – RS485 standard, other on request

Standard configuration:

FVC-401T-20-DC 4 video channels transmitter + 1 Bi-Di data³, 20 km, stand alone
 FVC-401R-20-CC 4 video channels receiver + 1 Bi-Di data³, 20 km, chassis card

