



Product Description

The KBC FPV*8-DB2 series uses the most advanced digital technologies to provide excellent, repeatable performance for today's CCTV systems. It supports transmission of up to eight analog composite video channels and two bi-directional data channels over one multimode or singlemode optical fibre. PAL, NTSC and SECAM video standards are fully supported, and the data channel supports all standard PTZ (Pan-Tilt-Zoom) control signals. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to clearly show the operational status of the unit. This series is available in either wall-mount or 4U chassis card configurations.

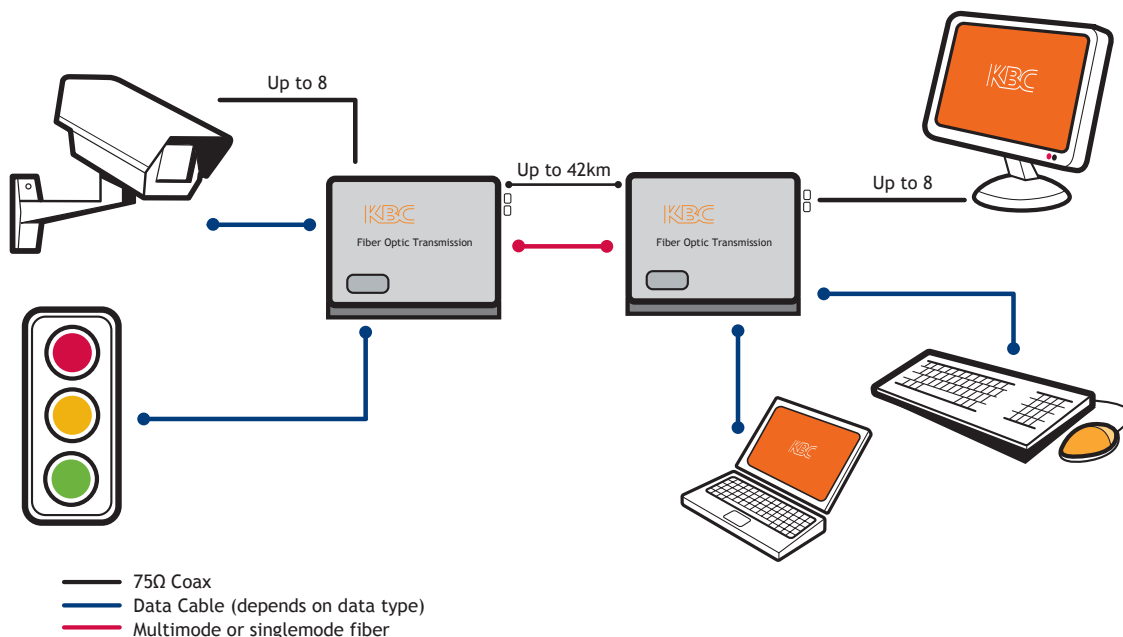


Product Features

- 8bit or 10bit digitally-encoded, non-compressed video
- Directly compatible with NTSC, PAL and SECAM CCTV camera systems
- Wide optical dynamic range. No adjustment required
- LED indicators provide quick diagnosis of all important system parameters
- Singlemode and multimode models
- Switchable 120Ω termination and biasing
- Module requires just two slots of 4U chassis
- Wall-mount and 4U chassis card configurations



Typical System Configuration



Specifications

Video

No. of Channels	8
Format	PAL/NTSC/SECAM
Input/Output	1.0V p-p typical, 75Ω
Bandwidth	5Hz - 6.5MHz
Digital encoding (non-compressed)	8 bit 10bit
Differential Gain (10-90% APL)	<2% <2%
Differential Phase (10-90% APL)	<2° <0.7°
Signal to Noise Ratio (SNR) weighted	>60dB >67dB

Data⁽¹⁾

Data Formats	RS232, RS422, RS485 (2W & 4W)
No. of two-way Channels	2
RS232 Data rate	DC - 115.2 kbps
RS422/485 Data Rate ⁽²⁾	DC - 250 kbps
Bit Error Rate	<1 x 10 ⁻¹²
Encoding Schemes	Manchester, Bi-Phase, NRZ, NRZI

Optical

Wavelength	1310nm, 1550nm
Fiber	Multimode or Singlemode
Number of Fibers	1

Power

Power Input Wall-mount	+12-24 Vac/dc
Power Supply ⁽²⁾	Input: 100 - 240 Vac Output: +12 Vdc
Chassis Card	Supplied from FR4 PSU

Environmental

Operating Temperature	-40° ~ +74° C / -40° ~ +165° F
Storage Temperature	-40° ~ +74° C / -40° ~ +165° F
Operating Humidity	0 to 95% non-condensing
Mean Time Between Failure (MTBF)	>100,000 Hours

Mechanical

Dimensions (Wall-mount L x W x H) ⁽⁶⁾	222mm x 158mm x 53mm (8.7" x 6.2" x 2.1")
Dimensions (Rack)	1U 19", 1U
Number of 4U Chassis Card Slots ⁽³⁾	2

Connectors

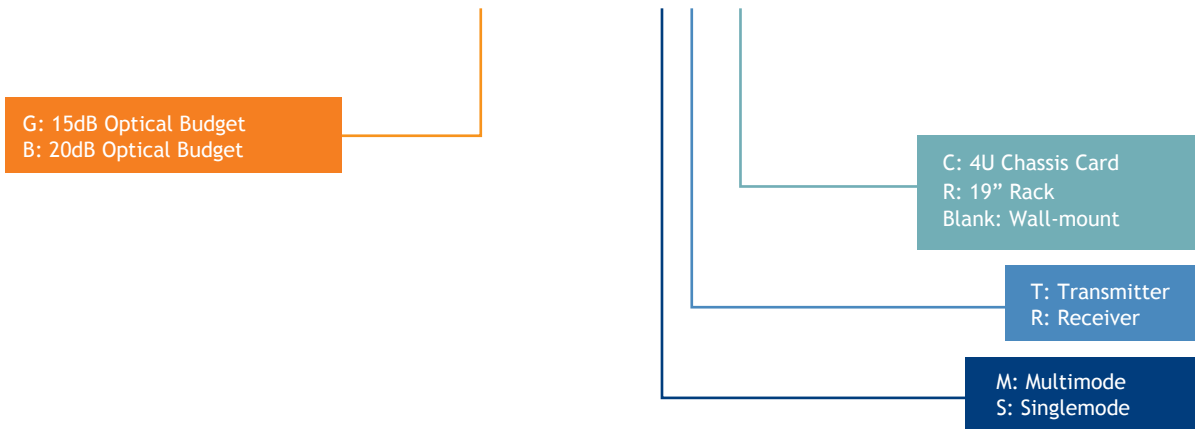
Video	BNC 75Ω
Data	Screw block terminal
Fiber	ST or FC (ST fitted as standard)
Power ⁽⁴⁾	Wall-mount Screw Block Terminal

DIP Switch Settings

Data	Switch selectable
120Ω termination	On / Off
Biasing	On / Off

Part Number Configurator

FPVG8-DB2-MT-C



Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance ⁽⁵⁾
			50µm	62.5µm	9µm		
FPVG8-DB2-M	Multimode	1	11dB	15dB		1310	0-4km
FPVB8-DB2-M	Multimode	1	16dB	20dB		1310	0-4km
FPVG8-DB2-S	Singlemode	1			15dB	1310	0-42km
FPVB8-DB2-S	Singlemode	1			20dB	1310	0-57km

Transmission distances up to 120km are available please contact KBC Networks for details.
All KBC Networks optical transmitters are LASER based.

- RS232, RS422 and RS485 are field selectable.
- Please select the power plug from US Standard, Euro 2 Circular or UK 3 Pin square when placing order.
- Supports maximum of up to 14 single slot cards in each 3U or 4U Chassis.
- Power lines are crimped and fitted to screw block connector in factory.
- Transmission distance is limited by optical loss of the fiber and loss introduced by connectors, splices and patch panels. Fiber bandwidth also limits the transmission distance.
- Product body dimensions. Please contact KBC Networks for product drawing and dimensions of mount.

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