



## Product Description

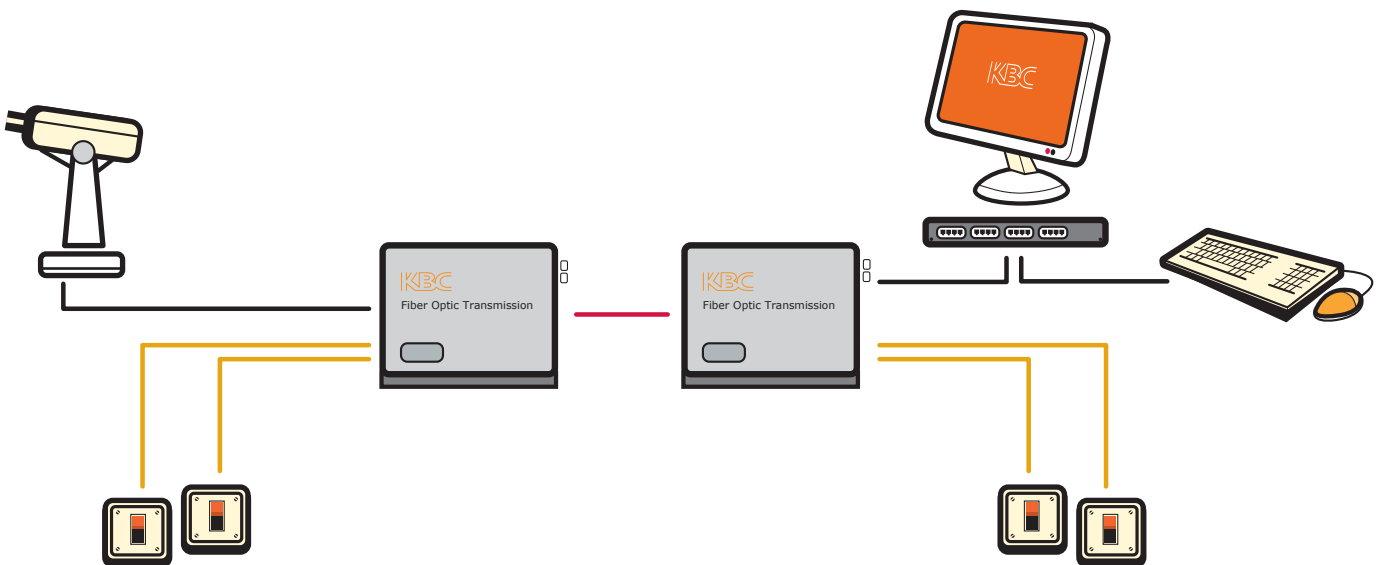
The KBC FCVA1 series uses the most advanced digital technologies to provide excellent repeatable performance for today's CCTV systems. It supports transmission of one video channel, one 'Up the Coax' data channel and two duplex contact closure channels over one multimode or singlemode optical fiber. PAL, NTSC and SECAM video standards are fully supported. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to clearly display the operational status of the unit. The series is available in wall mount and 3U chassis card.

## Product Features

- 10 bit digitally encoded non-compressed video transmission
- Dual module 3U chassis card
- Compatible with all major 'Up the Coax' manufacturers equipment
- 2 full duplex contact closure channels



## Typical System Configuration



## Specifications

### Video

No. of Channels	1
Format	PAL / NTSC / SECAM
Input/Output	1.0V pk - pk typical, 75Ω
Bandwidth	5 Hz ~ 6.5 MHz
Digital Encoding (non compressed)	10 bit
Differential Gain (10-90% APL)	<2.0%
Differential Phase (10-90% APL)	<2.0°
SNR	>60dB

### Data<sup>(1)</sup>

Data Formats	Up the Coax
One way Channels	1
or	
Two Way Channels	1

### Contact Closure

No. of duplex Channels	2
Response Time	500μs
Output	SPST Relay, Normally Open
Switch Rating	1 A @ 30 Vdc max, 0.5 A @ 125 Vac max

### Optical

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

### Power

Power Input	Wall mount	+12 Vdc @ 400 mA
Power Supply for Wall mount <sup>(2)</sup>		Input: 100 ~ 240 Vac; Output: +12 Vdc UL and cUL listed PSU Supplied from FR3 PSU
Chassis Card		

### Environmental

Operating Temperature	-40°~+70°C / -40°~+158°F
Storage Temperature	-40°~+70°C / -40°~+158°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)	135mm x 116mm x 36mm
Number of 3U Chassis Card Slot <sup>(3)</sup>	1

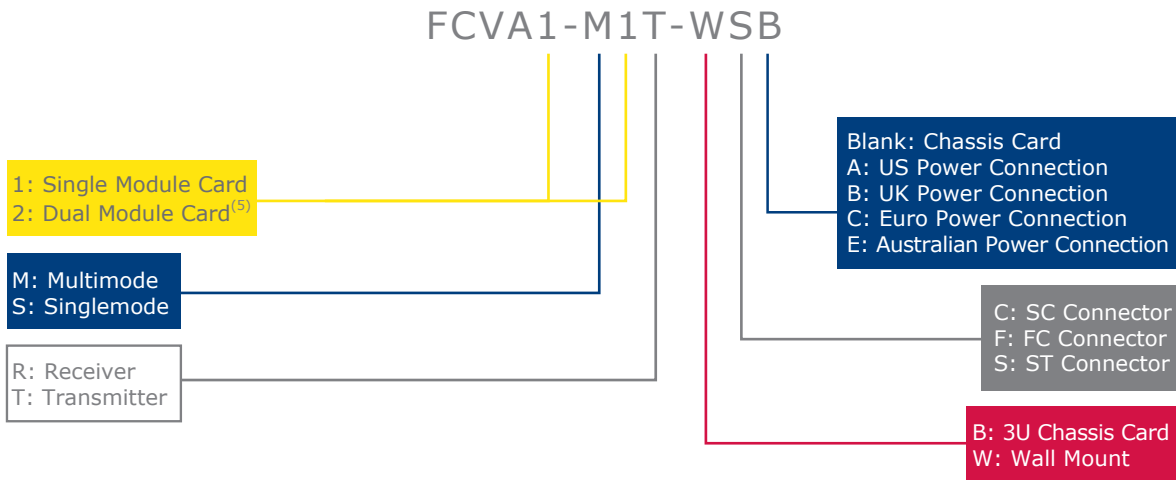
### Connectors

Video	BNC
Contact Closure	Screwblock Terminal
Fiber	ST, SC or FC (ST fitted as standard)
Power <sup>(4)</sup>	Wall Mount
	Screw Block Terminal

### DIP Switch Settings

BBV Telemetry	On / Off
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## Part Number Configurator



## Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance <sup>(6)</sup>
			50μm	62.5μm	9μm		
FCVA1-M*	Multimode	1	8dB	12dB		1310/1550	0~4km
FCVA1-S*	Singlemode	1			15dB	1310/1550	0~30km

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

- FCVA1 unit supports systems such as Pelco Coaxitron™, Bosch Bilinx™, Panasonic Proteus™, BBV and other leading manufacturers.
- 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 Chassis.
- Power lines are crimped and fitted to screw block connector in factory.
- The dual module 3U card is available in receiver format only and does not provide the contact closure circuits.
- 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.

Due to ongoing technological improvements, product specifications are subject to change without notice.