



## Product Description

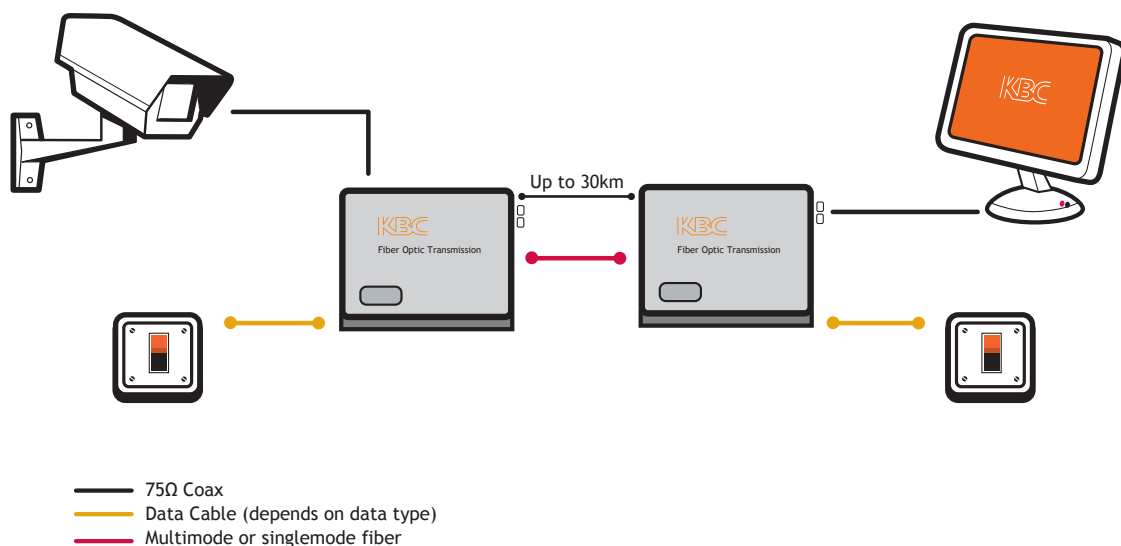
The KBC FDVA-IA1 series uses the most advanced digital technologies to provide excellent, repeatable performance for today's CCTV systems. It supports transmission of one analog composite video channel and one simplex (same direction as video signal) contact closure signal over one multimode or singlemode 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 show the operational status of the unit. The series is available in compact or 3U chassis card.



## Product Features

- 8 or 10 bit digitally-encoded, non-compressed video transmission
- Unique dual-channel chassis card
- Up to 28 channels in one 3U chassis
- LED indicators provide quick diagnosis of all important system parameters
- Multimode and singlemode models
- Compact and 3U chassis card configurations
- Fully independent contact closure circuit in same direction as video

## 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)	8 bit	10 bit
Differential Gain (10-90% APL)	<2.0%	<2.0%
Differential Phase (10-90% APL)	<2.0°	<1.0°
SNR	>60dB	>67dB

## Contact Closure

No of simplex channels	1
Response Time	500μs
Input	Dry Contact Closure, TTL
Output	SPST Relay, Normally Open
Switch Rating	1A @ 30 Vdc 0.5A @ 125 Vac max

## Optical

Wavelength	1310nm
Fiber	Multimode or Singlemode
Number of Fibers	1

## Power

Power Input	Compact	12-24 Vac/dc @ 150mA
Power Supply <sup>(1)</sup>		Input: 100 - 240 Vac Output: +12 Vdc UL and cUL listed PSU Supplied from FR3 PSU
Chassis Card		

## 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

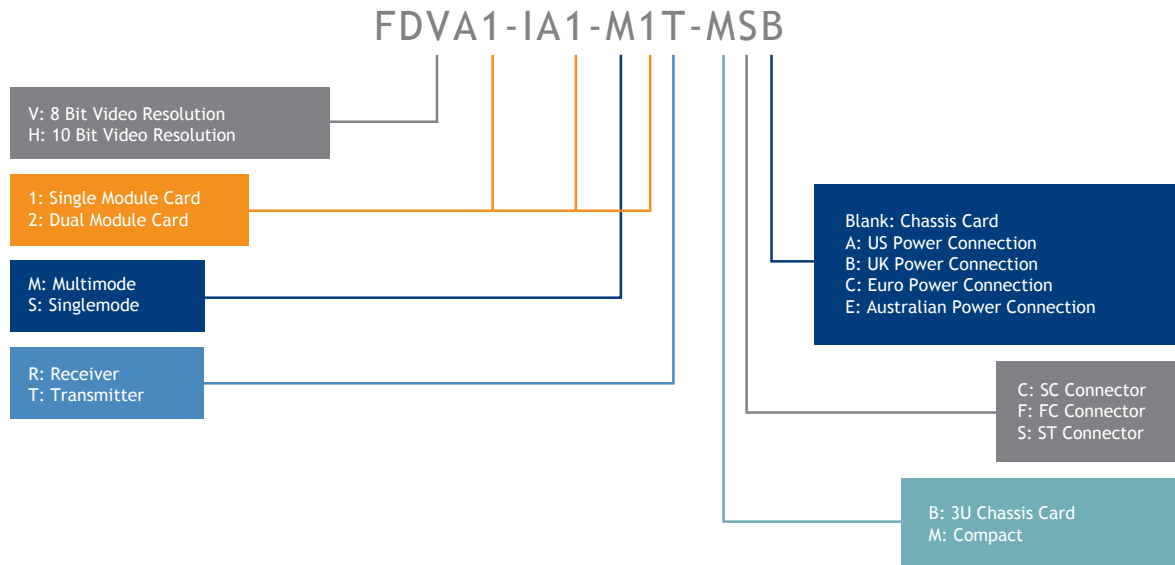
## Mechanical

Dimensions	(Compact L x W x H) <sup>(5)</sup>	70mm x 58mm x 28mm (2.8" x 2.3" x 1.1")
Number of 3U Chassis Card Slot <sup>(2)</sup>		1

## Connectors

Video	BNC 75Ω
Fiber	ST, SC or FC (ST fitted as standard)
Power <sup>(3)</sup>	Compact Screw Block Terminal
Contact Closure	Screw Block Terminal

# Part Number Configurator



# Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance <sup>(4)</sup>
			50μm	62.5μm	9μm		
FDVA1-IA1-M1*	Multimode	1	8dB	12dB		1310	0-4km
FDVA1-S*	Singlemode	1			15dB	1310	0-30km

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

1. Please select the power plug from US Standard, Euro 2 Circular or UK 3 Pin square when placing order.
2. Supports maximum of up to 14 single slot cards in each 3U Chassis.
3. Power lines are crimped and fitted to screw block connector in factory.
4. 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.
5. Product body dimensions. Please contact KBC Networks for product drawing and dimensions of mount

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