# % Opticomm travel by light



Video



Audio



Data

# Two-way Video with Two Audio and One Data for PTZ Control

The FMV-603 is a duplex Video transmission system with two duplex Audio ports and a single duplex Data port, ideal for CCTV cameras, PTZ video conferencing, and ITS. Status indicators on Video, Sync, FM Data, carrier detect, voltage, temperature, and optical levels are monitored via LEDs.

### System Design

All units come in a small module or Insert Card version. The cards can be inserted into our 18-slot, 19" rackmountable card cage (CC-18-80W), or one of our smaller Desk Top Card Racks (DTCR series).

The Desk Top Card Racks can handle one, two, four, or seven cards, allowing for greater flexibility and future expansion. They can sit on a flat surface as a larger stand-alone unit, or can be surface mounted with the flanges provided. Each one of our card housings operates with an appropriate power supply. The regulated switching power supply has short circuit protection and an input operating voltage of 85-265 V<sub>AC</sub>.



#### **Features**

- Multimode or singlemode operation over one fiber
- 8 MHz video bandwidth
- 10 Hz to 20 KHz audio bandwidth
- True DC restoration
- Flat frequency response
- Complies with RS-170 and RS-170A EIA video standards
- Compatible with NTSC, PAL and SECAM
- No EMI or RFI and no ground loops
- Stand Alone or Rack Mount
- Ideal for CCTV cameras, PTZ video conferencing, and ITS

					Wavelength		Fiber	Output	Receiver	Optical Loss		Conn
865	1310	1550	1270-1610 (CWDM)	Type	Mode	Suffix	Туре	Power	Sensitivity	Budget	Range*	Туре
•	•			LED	MM	LO/L1	50/125µ	-16 dBm	-34 dBm	18 dB	3 km	ST
•	•						$62.5/125\mu$					
	•	•		LED	MM	L2/L3	09/125μ	-10 dBm	-34 dBm	24 dB	25 km	FC
			•	Laser	SM	L4	09/125µ	-3 dBm	-36 dBm	33 dB	25-90 km	FC

<sup>\*</sup> Chromatic dispersion and additional losses should be taken into account.

#### Video

Video in/out impedance 75  $\Omega$ 

Video in/out level 1 volt peak to peak, 1.5 volts max

Video bandwidth 5 Hz to 7 MHz @ -3dB

Differential gain < 1.0 % typical Differential phase < 1.0° typical

Linearity/Tilt ± 1.1 % typical/≤ 0.5 % typical

Compatibility NTSC, PAL, SECAM, RS-170, RS-170A
Signal to noise ratio >67 dB using RS-250C standards @ 1 km

FM carrier frequency 70 MHz
Connector type BNC

#### **Audio**

Audio in/out impedance 600  $\Omega$  or 10k  $\Omega$  – balanced or unbalanced

Audio in/out level -6 to +6 dBm Frequency response 10 Hz to 20 KHz

Signal to noise ratio > 60 dB

Total harmonic distortion < 1.0 %, 1 KHz at maximum modulation

Connector type Hi-density 15 pin DB9 (DE15)

#### Data

Data rate DC to 300 Kbps

Bit error rate 10<sup>-9</sup>

Data formats available Async RS-232, RS-422, RS-485/2W, Genlock, Manchester,

20 mA current loop, TTL, or six Contact Closures

Connector type Hi-density 15 pin DB9 (DE15)

## General

Dimensions & Weight Stand Alone (SA): 7.16" L x 6.51" W x 1.75" H 53 oz

Insert Card (IC): 6.3" L x 1.7" W x 4.0" H 29 oz

Temperature Operating: -20° C to +70° C; Storage; -30° C to +85° C

 $\begin{array}{ccc} & \text{Humidity} & \text{0 to 95\% non-condensing} \\ \text{Operating voltage} & \text{9 V}_{\text{DC}} \text{ (300 mA) or } 110/220 \text{ V}_{\text{AC}} \\ \text{Vibration/Shock} & \text{Up to 5 g's/Up to } 12 \text{ g's} \end{array}$ 

**Diagnostics** 

Status monitoring LED indicator

YEAR WARRANTY

FCC PART 15 COMPLIANT

Emissions: FCC Part 15, ICES-003, AS/NZS, 3548, EN55022 Immunity: ENVS0204, EN61000-4-2,3,4,5,6,11

ty: UL1950, CAN/CSA 22.2, NO.950-95

MADE IN THE USA

# Sample Configuration

