



# Modular 10/100/1000 Mbps Ethernet Media/Mode Converter

## IE-iMcV-MultiWay



### PRODUCT FEATURES

- SNMP manageable
- Versatile 4 port device
- Converts 10/100/1000Mbps copper to fixed gigabit fiber
- Converts 10/100/1000Mbps copper to SFP on some models; SFP can support 100Mbps fiber, 1000Mbps fiber or 10/100/1000Mbps, 1000Mbps copper.
- Supports Jumbo Frames (up to 10240 bytes)
- Extended temperature

The IE-iMcV-MultiWay is a modular, CPE device providing two fixed 10/100/1000Base-T copper ports and 2 SFP ports. The SFP ports support fiber or copper SFPs. A console port and on-board DIP Switches provide configuration and mode options for the module. The IE-iMcV-MultiWay provides OAM functionality with 802.3ah and 802.1ag support on each port. As an Industrial Ethernet device, it supports an extended temperature range of -40° to +85° C.

IE-iMcV-MultiWay supports four distinct DIP switch-selectable configurations:

- 1+1 Uplink Protection, revertive
- 1+1 Uplink Protection, non-revertive
- A four port gigabit switch
- A dual copper to fiber SFP media/mode converter

As a 4-port device, it can be deployed with fiber redundancy (with or without 1+1 uplink protection) and status monitoring with management on all ports via SNMP, which now offers OAM for mission-critical applications. It can also be installed as dual 10/100/1000 Mbps copper to fiber media converter (utilized as two separate converters).

The IE-iMcV-MultiWay supports 10/100/1000 Mbps and 1 Gbps copper and 100 Mbps and 1 Gbps optical SFP modules, providing greater flexibility in network environments. The hot-swappable nature of SFPs and the numerous fiber modes and types that are available allow for easy configuration and future upgrading as network demands evolve.

The IE-iMcV-MultiWay offers a full feature set including Auto Negotiation, Selective Advertising, AutoCross (on copper ports), VLANs, loopback testing and OAM. Software updates can be downloaded through TFTP or iView2 (iConfig view).

### ORDERING INFORMATION

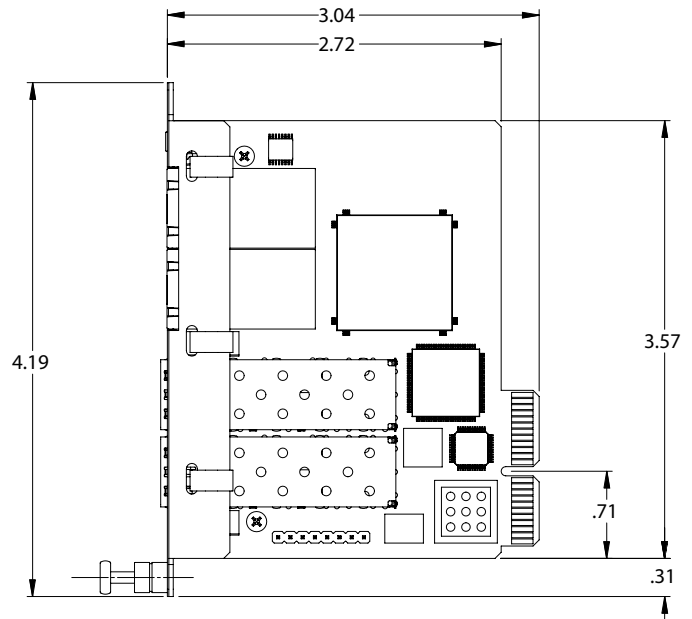
MODEL NUMBER	FIBER	FIBER PORTS	RANGE	ETHERNET PORTS	ETHERNET CONNECTOR
<b>IE-iMcV-MultiWay *</b>					
858-18121	SFP	2	Various	2	RJ45

\* SFPs Sold Separately



### MECHANICAL DIAGRAM

(dimensions in inches)



# Modular 10/100/1000 Mbps Ethernet Media/Mode Converter

IE-iMcV-MultiWay



## SPECIFICATIONS

### TECHNICAL

IEEE 802.3 10Base-T twisted pair  
 IEEE 802.3u 100Base-TX twisted pair  
 IEEE 802.3ab 1000Base-T twisted pair  
 IEEE 802.3z 1000Base-LX or SX fiber  
 Extended temperature range  
 Plug-and-play operation  
 Accepts RJ-45 and SFP connectors  
 50/125µm or 62.5/125µm multi-mode fiber  
 9/125µm single-mode fiber  
 Single-strand fiber and CWDM models  
 FX and TX Auto Negotiation  
 AutoCross for MDI/MDIX  
 Layer 2 packet switching, store and forward (forwarding rate: 14,880 pps for 10 Mbps, 148,000 pps for 100 Mbps, 1,480,000 Mbps for 1,000 Mbps)  
 Jumbo Frames support (up to 10240) at Gigabit speed

### STANDARD COMPLIANCE

IEEE 802.3ah  
 IEEE 802.1ag  
 IEEE 802.1q VLAN  
 SFP-MSA SFP standard (September 14, 2000)  
 SFF-8472 DDMI standard (Revision 1.0)

### MECHANICAL

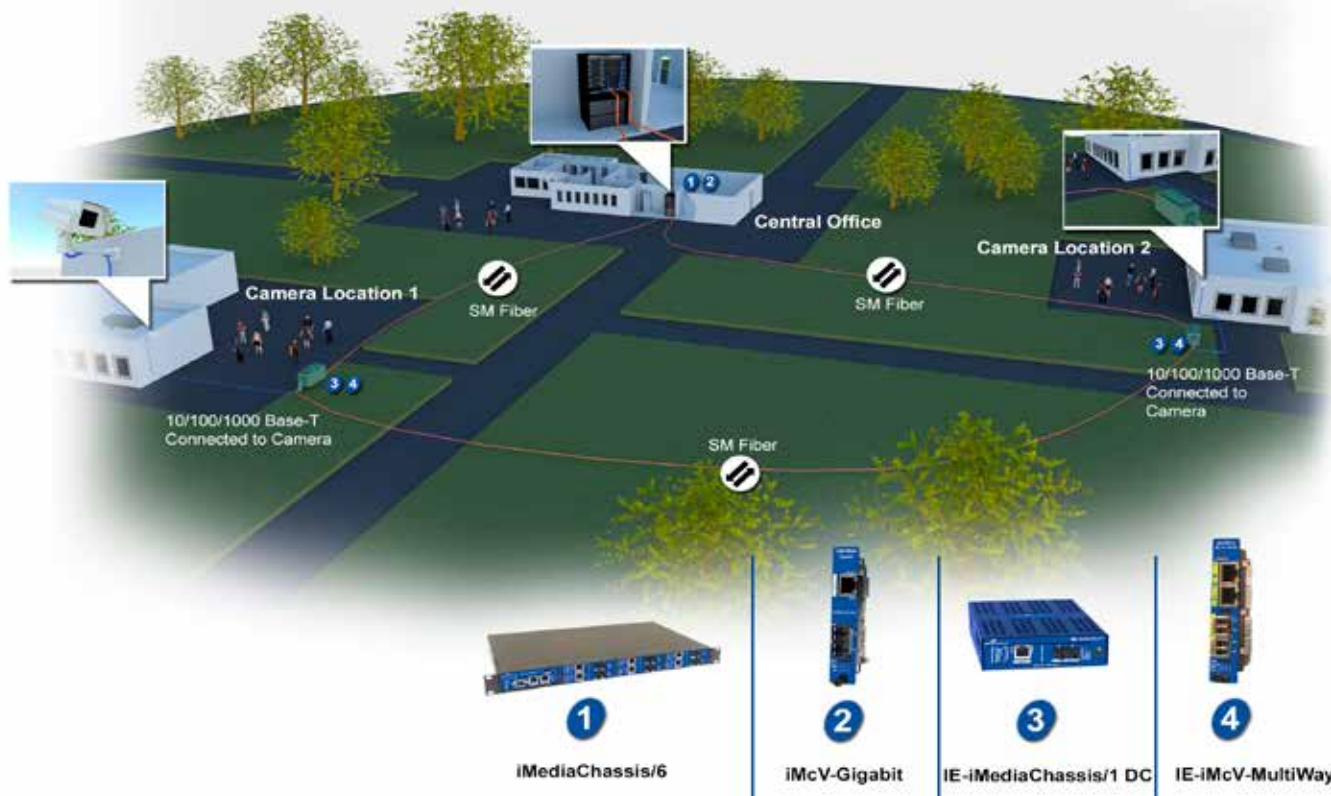
Dimensions 4.19H x 0.78W x 2.75D in (10.74 x 2 x 7.05 cm)  
 Shipping Weight 0.30 lbs (.11 kg)

### ENVIRONMENTAL

Operating Temperature: -40° F to +185° F (-40° C to +85° C)  
 Storage Temperature: -67 F to +257° F (-55° C to +125° C)  
 Operating Humidity 5% to 95% (non-condensing), 0 – 10,000 ft. altitude

### REGULATORY APPROVALS

FCC Class A  
 UL, cUL, CE



### IE-iMcV-MultiWay in Action:

A Brazilian city's transportation department responsible for its subways, ships, boats and buses needed to add IP video surveillance equipment to its network to monitor and manage people movement. Networking the remote IP surveillance cameras to the central office had requirements and challenges: cameras would be outdoors, needed remote management capabilities and secure connectivity up to 30Km away. The customer had already invested in a chassis-based media converter infrastructure and preferred a DC powersolution for reliability. Additionally, the video collected at the copper-port-based cameras would have to be converted for long distance fiber optic transmission back to the copper-port servers at the central office.

### The Solution:

iMcV-Gigabit copper-to-fiber media converters were installed in the existing six-slot chassis to connect the two central office servers. At both camera locations, a four-port IE-iMcV-MultiWay converter with SNMP and rugged temperature specs was installed in an extended-temperature, DC-powered chassis, then housed in a NEMA enclosure at the base of a pole where the IP camera was mounted on top. One copper port on the MultiWay connected the copper-port-based IP camera. The fiber connection emanated from the converter installed at the central office, connecting point-to-point through the two fiber ports on each MultiWay converter installed at each camera, and then continued back to the central office.

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