

A Compact, Versatile, SNMP Managed Gigabit Ethernet Module

Features and Benefits

Flexible Solution

- Four devices in one unit
- Supports 3R's (Re-amplify, Re-shape, Re-time) optical signal regeneration
- 1+1 uplink protection (< 50 mSec)
- Supports per port service VLAN
- Features RMON1 MIB-II Statistics
- Jumbo Frames support (up to 10240 bytes)
- Support for daisy chain expansion
- Modular form factor

Advanced Remote Monitoring/ Management

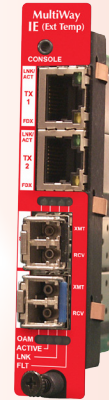
- Supports IEEE 802.3ah OAM (active/passive), 802.1ag CFM (Connectivity Fault Management) and Y.1731 on all ports
- Discovery, Link Monitoring, Performance Monitoring and Remote Loopback
- Features Bandwidth Management including Limiting and Traffic Shaping with burst capability and priority queuing
- Rate limiting can be done at Layer 1, 2 or 3
- Via UMA, can act as a Remote when connected to a Host iMcV-Giga-FiberLinX-II
- Generates SNMP TRAPS based on events
- Last Gasp alarm via 802.3ah and/or SNMP TRAP
- RS-232 CLI (Command Line Interface) console port

SFP Support

- Auto negotiate speed and flow control for 10/100/1000 copper SFPs with SGMII
- Supports fixed speed 1 Gbps full-duplex copper SFPs
- Auto detect for 100 or 1000 optical SFPs

"Industrial Ethernet" (IE) Features

- Extended temperature functionality, up to -40° to +85° C
- Powering options include redundant internal AC powered chassis



* SFPs sold separately

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.

There are four distinct DIP Switch selectable configurations that the IE-iMcV-MultiWay supports. Among them are a 1+1 Uplink Protection Switch, a 4-Port Gigabit Switch, and a Dual Copper to Fiber SFP Media/Mode Converter (two gigabit fiber media converters in one).

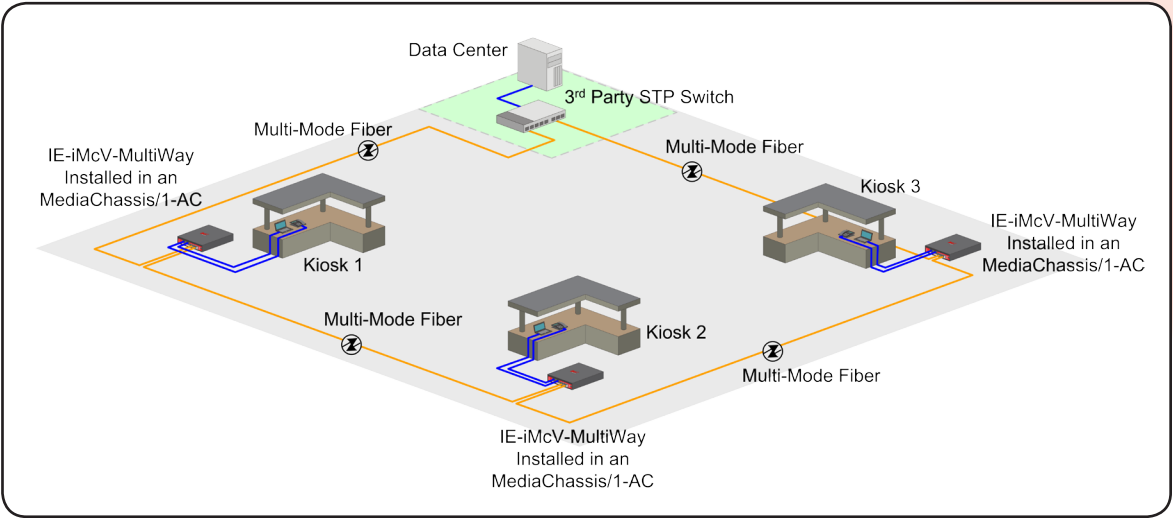
As a 4-port device, it can be deployed with fiber redundancy (with or without 1+1 uplink protection) and status monitoring with management on all ports via SNMP, which now offers OAM for mission-critical applications. It can also be installed as dual 10/100/1000 Mbps copper to fiber media converter and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

Application Example

In the following example, three separate IE-iMcV-MultiWay’s installed in single-slot AC chassis are connecting multiple kiosk’s in a ring-type network utilizing a Spanning Tree enabled switch. The ring topology provides redundancy to the network. If a fiber break were to occur somewhere along any segment, the spanning tree protocol provides an automatic backup link.



Technical Specifications

- 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

Shipping Weight:
0.30 lbs (.11 kg)

Regulatory Approvals:
• FCC Class A
• UL, cUL, CE

Standards 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)

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

Storage Temperature:
-67 F to +257° F (-55° C to +125° C);
5% to 95% (non-condensing)

Ordering Information

PART #	DESCRIPTION	DISTANCE
IE-iMcV-MultiWay*		
858-18121	IE-iMcV-MultiWay Module, 2TX/2SFP	Varies

* SFP modules are sold separately. Two (2) SFP transceivers are needed for full device functionality. For more information on compatible IMC Networks SFPs, go to: www.imcnetworks.com/Products/product.cfm?family=32

PART #	DESCRIPTION
IE-iMcV-MultiWay Compatible Chassis	
850-13100	MediaChassis/1-AC
850-13101	MediaChassis/2-AC ¹
850-13106	IE-MediaChassis/2-AC ¹
850-10949-2AC	iMediaChassis/3 (2 fixed redundant AC power supplies) ¹

¹ SNMP Card is not required to manage IE-iMcV-MultiWay in these chassis