

# iMcV MediaLinX Series

10/100 and 10/100/1000 Mbps Ethernet SNMP-Manageable, Switching Media Converters

### The Optical Ethernet Company

## The iMcV MediaLinX series offers the most flexible Ethernet switching media converters in the industry.

Dissimilar media types, protocols and duplex settings can make LAN internetworking and Fiber-to-the-Subscriber projects challenging undertakings. For example, if the service provider network infrastructure is 100 Mbps or Gigabit fiber but the customer wants to receive a standard 10 Mbps Ethernet interface to their LAN, making the connection between the two network segments can be difficult. The complexity of today's mixed media networks and the increasing demand for bandwidth requires access equipment that is both flexible in connecting different media types and scalable between different speeds.

#### Convert speed, media and duplex mode:

The *iMcV MediaLinX* series of switching media converters offers service providers and enterprise networks unparalleled flexibility in connecting copper-based networks to Fast Ethernet or Gigabit fiber optic infrastructures. The SNMP-manageable *MediaLinX* converters allow device managers to use *Auto-Negotiation* functionality on the twisted pair port for plug-and-play operation, or to manually configure the port for the desired speed and duplex mode. What's more, you can even set the fiber port for Half- or Full-Duplex operation (10/100 Mbps only). The *iMcV MediaLinX* series includes two models:

#### iMcV-MediaLinX:

- One 10/100 twisted pair port with an RJ-45 connector.
- One 100 Mbps fiber port with ST, SC or MT-RJ connector(s)
- Available with fault-tolerance (see below).

#### iMcV-Giga-MediaLinX:

- One 10/100/1000 twisted pair port with an RJ-45 connector.
- One 1000 Mbps fiber port with SC connector(s).

**iMcV-FT-MediaLinX** provides a dual data path; during operation, the primary link segment is active while the secondary link segment is non-active to prevent an illegal Ethernet loop. If the primary link segment fails, *iMcV-FT-MediaLinX* automatically places the secondary link segment online and makes the primary link segment non-active. This allows connected devices to continue to transmit and receive data. Once the primary link segment is re-established, that link segment will become active once again.

The *iMcV MediaLinX* series also includes troubleshooting features and LEDs to assist in network diagnostics as well as make isolating cable breaks easier should they occur. In addition, hot-swappable *MediaLinX* modules significantly reduce operation costs by allowing other modules within the same chassis to remain up and running during product upgrades, maintenance and troubleshooting.

#### Easily configure and manage converters with the GUI-based *iView*<sup>2</sup>:

As an SNMP management application, *iView*<sup>2</sup> gives network managers the ability to monitor and control IMC Networks' products. *iView*<sup>2</sup> runs standalone on Windows

NT/XP/2000, as a standalone Java Application for other operating systems, as a snapin module for HP OpenView, as a Web Server running under IIS or as a Java Web Servlet. For assistance in selecting the right version of *iView*<sup>2</sup> for your operating system, please visit our web site at the following:

Module Number: 13 Nodule Type:	MediaLinX
Twisted Pair Port	Connection Settings
Description: erstwhile Speed Control: Force 100 - Save Changes	Hegoblater Auto On - Advertise Selected _ Ouplan Internation - Flow Chil Disabled - Save Changes
Fiber Optic Port	LinkLoss Setting
Description: tetoff FiberAlert: Disabled •	FX OFF and TX OFF



## Same unit converts speed, media and duplex mode!

- Available in 10/100 and 10/100/1000 models
- Configure twisted pair port for *Auto-Negotiation* or force the speed
- Twisted pair and fiber ports can be individually configured for Half- or Full-Duplex operation

## Easy to configure and manage with GUI-based iView<sup>2</sup>

- Up and running in less than 5 minutes
- Easily adjust settings when user requirements change
- Easy upgrades; no user intervention or visits to remote locations required
- Monitor and control all connections

## Meets a variety of installation requirements

- Available for multi-mode or singlemode fiber
- Available for single-strand fiber
- Available in fault-tolerant versions

#### **Eases Troubleshooting**

• *LinkLoss, FiberAlert,* SNMP management and LEDs assist in diagnosing problems on fiber optic networks



http://www.imcnetworks.com/go/iview2

#### www.imcnetworks.com



www.mediaconverter.com



## Technical Specifications

#### iMcV-MediaLinX

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3u 100Base-FX or SX fiber
- Available with fault-tolerance
- Switch-over rate: 8 milliseconds (FT only)
- Supports jumbo packets up to 1916 bytes

#### iMcV-Giga-MediaLinX

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T twisted pair
- IEEE 802.3z 1000Base-LX or SX fiber
- Supports packets up to 1536 bytes

#### All Modules

- IEEE 802.3x Flow Control
- AutoCross for MDI-II/MDI-X
- Features LinkLoss and FiberAlert
- Features Auto-Negotiation and Selective Advertising
- Layer 2 packet switching, store and forward operation
- Forwarding rate: 14,880pps for 10 Mbps; 148,800pps for 100 Mbps;
- 1,488,000pps for 1000 Mbps (Gig only) • 50/125µm or 62.5/125µm multi-mode fiber
- 9/125µm single-mode fiber
- Available for single-strand fiber
- Connectors: RJ-45, and ST, SC or MT-RJ

- Installs in any iMediaChassis, iMediaCenter or MediaChassis
- Supports GUI-Based iView<sup>2</sup>
- · Supports Half- and Full-Duplex operation
- Includes diagnostic LEDs
- Includes hot-swappable architecture

Regulatory Approvals:

• FCC Class A • UL/cUL, CSA, CE Shipping Weight: .30 lbs (.11 kg)

Operating Temperature:

32° to 122°F (0° to +50°C); 5% to 90% (non-condensing), 0 – 10.000 ft. altitude

**Storage Temperature:** -13° to +158°F (-25° to +70°C); 5 to 90% (non-condensing)

### Fiber Optics Specifications

For each product listed below in the Ordering Information section, the number in the **[XX]** denotes an approximate fiber distance based on industry-standard fiber specifications and worst-case (connector loss, aged fiber, splices, etc.) installations. You can typically achieve substantially longer distances. Actual distances may vary for each installation. For complete power budgets and information on calculating specific distances, please visit web site our at **www.imcnetworks.com/go/fcs** or contact IMC Networks Fiber Consulting Services at 949-465-3000. Twisted pair distance is 100 meters.

### **Ordering Information**

#### iMcV-MediaLinX

INICV-INEGIALI	nA	
56-14911	iMcV-MediaLinX, TX/FX-MM1300-ST [2 Km]	
56-14912	iMcV-MediaLinX, TX/FX-MM1300-SC [2 Km]	
56-14911-MT	iMcV-MediaLinX, TX/FX-MM1300-MT [2 Km]	
56-14915	iMcV-MediaLinX, TX/FX-SM1310/PLUS-ST [40 Km]	
56-14916	iMcV-MediaLinX, TX/FX-SM1310/PLUS-SC [40 Km]	
56-14917	iMcV-MediaLinX, TX/FX-SM1310/LONG-ST [80 Km]	
56-14918	iMcV-MediaLinX, TX/FX-SM1310/LONG-SC [80 Km]	
56-14921	iMcV-MediaLinX, TX/FX-SM1550/LONG-SC [100 Km]	
iMcV-MediaLinX Single-Strand Fiber		
56-14944	iMcV-MediaLinX, TX/SSFX-SM1310-SC [20 Km]	
56-14945	iMcV-MediaLinX, TX/SSFX-SM1550-SC [20 Km]	
56-14946	iMcV-MediaLinX, TX/SSFX-SM1310/PLUS-SC [40 Km]	
56-14947	iMcV-MediaLinX, TX/SSFX-SM1550/PLUS-SC [40 Km]	
56-14948	iMcV-MediaLinX, TX/SSFX-SM1310/LONG-SC [60 Km	
56-14949	iMcV-MediaLinX, TX/SSFX-SM1550/LONG-SC [60 Km	
iMcV-ET-Medial inX Fault-Tolorant		

INCV-FI-MEDIALINX FAUIT-IOIERANT		
56-14929-MT	iMcV-FT-MediaLinX, TX + 2*FX-MM1300-MT [2 Km]	
56-14960	iMcV-FT-MediaLinX, 2*TX + FX-MM1300-ST [2 Km]	
56-14961	iMcV-FT-MediaLinX, 2*TX + FX-MM1300-SC [2 Km]	

#### iMcV-FT-MediaLinX Fault-Tolerant

6-14962	iMcV-FT-MediaLinX, 2*TX + FX-SM1310/PLUS-ST [40 Km]
6-14963	iMcV-FT-Medial inX_2*TX + FX-SM1310/PI US-SC [40 Km]
6-14964	iMcV-FT-MediaLinX, 2*TX + FX-SM1310/LONG-ST [80 Km]
6-14965	iMcV-FT-MediaLinX_2*TX + FX-SM1310/LONG-SC [80 Km]
6-14966	iMcV-FT-MediaLinX, 2*TX + FX-SM1550/LONG-SC [100 Km]

#### iMcV-Giga-MediaLinX

56-14950	iMcV-Giga-MediaLinX, TX/SX-MM850-SC [300 m]	
56-14951	iMcV-Giga-MediaLinX, TX/LX-SM1310-SC [10 Km]	
56-14952	iMcV-Giga-MediaLinX, TX/LX-SM1310/PLUS-SC [40 Km]	
56-14953	iMcV-Giga-MediaLinX, TX/LX-SM1310/LONG-SC [70 Km]	
iMcV-Giga-MediaLinX Single-Strand Fiber <sup>1</sup>		
56-14940	iMcV-Giga-MediaLinX, TX/SSLX-SM1310-SC [10 Km]	
56-14941	iMcV-Giga-MediaLinX, TX/SSLX-SM1550-SC [10 Km]	
56-14942	iMcV-Giga-MediaLinX, TX/SSLX-SM1310/PLUS-SC [40km]	
56-14943	iMcV-Giga-MediaLinX, TX/SSLX-SM1550/PLUS-SC [40 Km]	

<sup>1</sup>These products have single-strand fiber technology. Deploy in pairs, or connect to another compatible IMC Networks single-strand fiber product. For more information go to: www.imcnetworks.com/products/SSFX.cfm

## **Related Products — iMcV Series Modules**

The *iMcV Series* includes 10 Mbps (*iMcV-PIM*), 100 Mbps (*iMcV-LIM*), autosensing 10/100 Mbps (*iMcV-LIM* 10/100), 155 Mbps ATM (*iMcV-ATM*) and Gigabit Ethernet (*iMcV-Gigabit*) copper-to-fiber media conversion modules as well as 10/100 and 10/100/1000 switching media converters (*MediaLinX* series). T1/E1/J1 media converters (*iMcV-T1/E1/J1*), DS3/E3 media converters (*iMcV-DS3/E3*) and VDSL to Ethernet media converters (*iMcV-VDSL-LANextender*) are also available. In addition, IMC Networks has the most extensive line of protocol-independent (*iMcV-S2MMs, iMcV-S2SMs* and *iMcV-M2MMs*) fiber mode conversion modules. The *iMcV* series also includes: *iMcV-FiberLinX, iMcV-WDM* and *iMcV-FiberWay* modules. Single-strand fiber versions are available for many of our media converters.

For more information on the various products in the *iMcV Series*, please refer to the IMC Networks Web site at: http://www.imcnetworks.com/Products/ProdDir.cfm

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Fiber Consulting Services For information call: TEL: 949-465-3000 1-800-624-1070 (US/CAN) +32-16-550880 (Europe) fcs@imcnetworks.com Copyright © 2005 IMC Networks. All rights reserved. The information in this document is subject to change without notice. IMC Networks assumes no responsibility for any errors that may appear in this document. Specific product names may be trademarks or registered trademarks and are the property of their respective companies.

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