IMC Networks
The Optical Ethernet Company

# iMcV-DS3/E3/STS-1

**DS3/E3 Converters with Remote Management**

## Protocol-selectable DS3/E3/STS-1 converter extends transmission distances over fiber optics and reduces operational costs with remote end management.

The *iMcV-DS3/E3/STS-1* converter is perfect for telecommunications and services networks, as well as enterprise campus networks utilizing DS3/E3/STS-1 coaxial circuits in high-speed data networking. *iMcV-DS3/E3/STS-1* enable users to convert the coax media to single-mode fiber to extend the distance of data transmissions over MAN access networks up to 100 Km. Also use *iMcV-DS3/E3/STS-1* modules in premises network applications to convert the in-coming circuit to multi-mode fiber for distribution into the structured cabling system.

Available with remote management via the fiber port, *iMcV-DS3/E3/STS-1* products enable network managers to conduct loopback testing, and monitor and manage units located up to 100 Km away at a remote location. Since IMC Networks' management technology functions transparently to the frame format, customers will not experience overhead or loss of a data channel typically associated with remote management or SNMP polling. Customer traffic will always be full bit rate.

### *iMcV-DS3/E3/STS-1* modules:

- Include one fiber port with ST or SC connectors
- Include one coax pair with a BNC connector
- Have switch-selectable protocol to operate at 45 Mbps (DS3), 34 Mbps (E3) or 52 Mbps (STS-1).
- Install in any SNMP-manageable *iMediaChassis* or *iMediaCenter*, or in an unmanaged *MediaChassis*.
- Include a mechanism for removing jitter from transmitted data
- Are available in **single-strand fiber** versions that can effectively double the capacity of fiber.

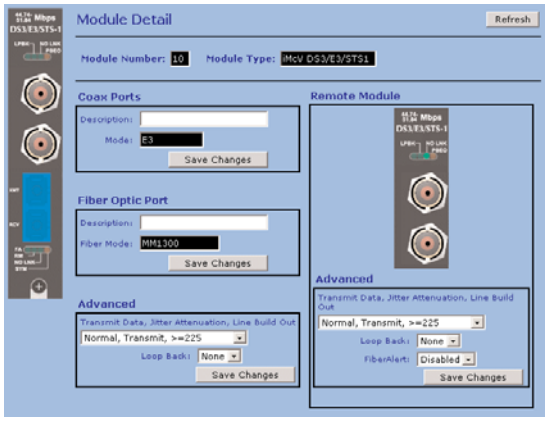
### *iMcV-DS3/E3/STS-1* modules make troubleshooting easy by including:

- A line integrity test feature
- The *FiberAlert* feature that notes the loss of one strand of fiber at the receiver end, then stops transmitting data and the link signal until a signal or link pulse is received
- Two modes of operation (fiber and coax) for loopback testing
- The Transmit Data Source diagnostic feature which sends specific patterns of data (transmit all unframed ones; transmit a pattern of zeros, and ones and transmit a Pseudorandom Bit Sequence [PRBS]) to determine problems with the cable.

### Easily configure and manage converters with the GUI-based *iView²*:

As an SNMP management application, *iView²* gives network managers the ability to monitor and control IMC Networks' products. *iView²* runs standalone on Windows NT/XP/2000, as a standalone Java Application for other operating systems, as a snap-in 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 *iView²* for your operating system, please visit our web site at:

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




### Switch Selectable Protocol

- Operates at 45 Mbps (DS3), 34 Mbps (E3) or 52 Mbps (STS-1)

### Management

- Conduct loopback tests, monitor/manage units via GUI-Based *iView²*
- Remote unit supports secure, in-band management
- Full bit rate for customer traffic

### Supports more fiber choices

- Available for multi-mode or single-mode fiber
- Single-strand fiber versions
- Supports very long fiber distances

### Eases Troubleshooting

- Loopback testing modes, plus SNMP management and LEDs, assist in diagnosing problems on fiber optic networks

Made in USA

6-YEAR Comprehensive Warranty

ISO 9001:2000 REGISTERED

## Technical Specifications

- Protocol-Selectable — Operates at DS3 (45 Mbps), E3 (34 Mbps) or STS-1 (52 Mbps) protocols
- Includes ability to manage remote unit
- Conduct two types of loopback tests
- Full bit rate for customer traffic
- Jitter attenuation
- Line build out
- Features FiberAlert
- Installs in any iMediaChassis, iMediaCenter or MediaChassis
- Supports GUI-Based *iView²*
- 50/125µm or 62.5/125µm multi-mode fiber
- 9/125µm single-mode fiber
- Available for single-strand fiber
- **Connectors:** BNC, and ST or SC
- Supports Half- and Full-Duplex operation
- Includes diagnostic LEDs
- Includes hot-swappable architecture

**Shipping Weight:** .30 lbs (.11 kg)

**Regulatory Approvals:**
· FCC Class A · UL/cUL, CSA, CE

**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

Always deploy *iMcV-DS3/E3/STS-1* converters in pairs.

**Multi-Mode (MM)**

| | |
|---|---|
| **50-14300** | iMcV-DS3/E3/STS-1, BNC/FX-MM1300-ST [2 Km] |
| **50-14301** | iMcV-DS3/E3/STS-1, BNC/FX-MM1300-SC [2 Km] |

**Single-Mode (SM)**

| | |
|---|---|
| **50-14302** | iMcV-DS3/E3/STS-1, BNC/FX-SM1310/PLUS-ST [40 Km] |
| **50-14303** | iMcV-DS3/E3/STS-1, BNC/FX-SM1310/PLUS-SC [40 Km] |
| **50-14304** | iMcV-DS3/E3/STS-1, BNC/FX-SM1310/LONG-ST [80 Km] |
| **50-14305** | iMcV-DS3/E3/STS-1, BNC/FX-SM1310/LONG-SC [80 Km] |
| **50-14306** | iMcV-DS3/E3/STS-1, BNC/FX-SM1550/LONG-SC [100 Km] |

**Single-Strand Fiber[1]**

| | |
|---|---|
| **50-14310** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1310-SC [20 Km] |
| **50-14311** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1550-SC [20 Km] |
| **50-14312** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1310/PLUS-SC [40 Km] |
| **50-14313** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1550/PLUS-SC [40 Km] |
| **50-14314** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1310/LONG-SC [60 Km] |
| **50-14315** | iMcV-DS3/E3/STS-1, BNC/SSFX-SM1550/LONG-SC [60 Km] |

[1] *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**


**IMC Networks**
19772 Pauling
Foothill Ranch, CA 92610
TEL: 949-465-3000
FAX: 949-465-3020
sales@imcnetworks.com
www.imcnetworks.com

**IMC Networks**
**(Europe)**
Herseltsesteenweg 268
B-3200 Aarschot Belgium
TEL: +32-16-550880
FAX: +32-16-550888
eurosales@imcnetworks.com

**IMC Networks**
**(Eastern US/Latin America)**
18840 US Hwy. 19 North Suite 400
Clearwater, FL 33764
TEL: 727-524-8152/524-8071 (Latin)
FAX: 727-524-8432
latinsales@imcnetworks.com

**IMC Networks**
**Fiber Consulting Services**
For information call:
TEL: 949-465-3000
1-800-624-1070 (US/CAN)
+32-16-550880 (Europe)
fcs@imcnetworks.com





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