iMcV-T1/E1/J1-LineTerm

T1/E1/J1 Standard and Extended Temperature (IE) Line Terminating Modules

iMcV-T1/E1/J1-LineTerm Series products are ideal for extending PBX or legacy TDM circuits over fiber optics in the local loop and long-haul applications.

Features and Benefits

Switch Selectable Protocol
- Operates at T1/J1 or E1 line rates
- Line Terminating function for improved management and fault isolation
- Convenient DTE/DCE switch

Supports more fiber choices
- Available for multi-mode or single-mode fiber
- IE-iMcV-T1/E1/J1-LineTerm TP/SFP is compatible with IMC Networks' SFPs and all standard MSA compliant SFP transceivers

Eases Troubleshooting
- Loopback testing modes, plus optional SNMP management and LEDs, assist in diagnosing problems on fiber optic networks
- Supports fiber and copper remote loopback control
- Internal test-head function for transmitting and detecting PRBS test patterns
- LED Line Diagnostics
- Support for Alarm Indication Signals (AIS)* for improved fault isolation
- Supports Remote Alarm Indication (RAI)** for remote fault notification
- Supports Config Control, a feature that retains the latest configuration on a module regardless of how the initial configuration was setup; whether by DIP Switch or SNMP Management Module (available on IE-iMcV-T1/E1/J1-LineTerm TP/SFP)[1]

Management
- Conduct loopback tests, monitor/manage units via GUI-Based iView[2]
- Supports secure, out-of-band management
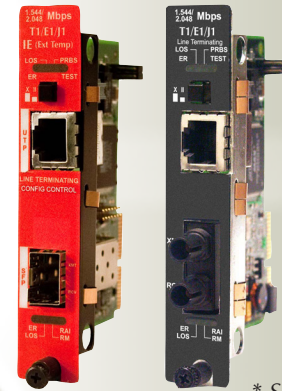- Diagnostic LEDs (LOS, ER, RAI, PRBS)

* AIS is a standards-compliant alarm indication signal sent whenever a loss of signal is detected.
** RAI provides a local LED indication when a fault exists on the equipment at the far end of the optical link.
[1] iView[2] v.1.8.9 and SNMP firmware v. C4 must be installed to use the Config Control feature.

Application Example

IE-iMcV-T1/E1/J1-LineTerm media converters allow users to link two PBXs, CSUs or routers and extend the distance between the two over fiber. Implementing DDMI enabled SFPs provides additional information via SNMP.
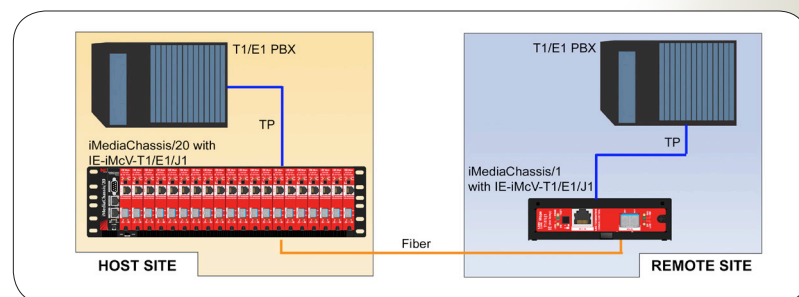

* SFPs sold separately

The iMcV-T1/E1/J1-LineTerm Series is perfect for service providers and enterprise campus networks utilizing T1/E1/J1 twisted-pair circuits. The modules enable users to convert twisted-pair media to single-mode and mulit-mode fiber and extend the distance of data transmissions over MAN access networks up to 80 km.

Available with remote management via the fiber port, the iMcV-T1/E1/J1-LineTerm Series enables network managers to conduct loopback testing, and to monitor and manage units located up to 80 km away. Since IMC Networks' management technology functions transparently to the user data, real-time, end-to-end management is provided at all times. Signal Loss conditions are propagated using the standards-compliant AIS signal.

Easily configure and manage converters with the GUI-based iView[2]:
Easily configure and manage converters with the GUI-based iView[2]. As an SNMP management application, iView[2] gives network managers the ability to monitor and control IMC Networks' products. iView[2] runs standalone on Windows NT/XP/2000 or as a Web Server running under IIS. For assistance in selecting the right version of iView[2] for your operating system, visit our web site at: http://www.imcnetworks.com/Products/iView2.cfm

HOST SITE

T1/E1 PBX
TP
iMediaChassis/20 with IE-iMcV-T1/E1/J1

T1/E1 PBX
TP
iMediaChassis/1 with IE-iMcV-T1/E1/J1

Fiber

REMOTE SITE

Technical Specifications

- Protocol-Selectable — Operates at T1/J1 (1.544 Mbps) and E1 (2.048 Mbps) protocols
- Supports Alarm Indication Signals (AIS)
- Internal Test Head Function (PRBS, 1/0, All 1's)
- Ability to manage remote unit from host end
- Supports fiber and copper Loopback
- Selectable line buildout (0 - 655 ft.)
- Includes DTE/DCE switch on converter
- Installs in any iMediaChassis or MediaChassis chassis*
- Supports GUI-Based iView[2]
- CSU Line Gain (7.5, 15, 22.5 db)
- Monitor Boost (20, 26, 32 db)
- Supports secondary line protection
- 50/125μm or 62.5/125μm multi-mode fiber
- 9/125μm single-mode fiber
- Available for single-strand fiber

Connectors:

- RJ-48 and ST, SC or SFP

Regulatory Approvals:

- FCC Class A
- UL/cUL
- CSA
- CE

Shipping Weight:

0.30 lbs (0.11 kg)

Power Information:

0.55A @ 5V (Typical)

Operating Temperature:
+32° to +122° F (0° to +50° C);
-4° to +158° F (-20° to +70° C) *IE-iMcV-T1/E1/J1-LineTerm*;
5% to 95% (non-condensing), 0 – 10,000 ft. altitude

Storage Temperature:

-13° to +158° F (-25° to +70° C);
-40° to +185° F (-40° to +85° C)
IE-iMcV-T1/E1/J1-LineTerm;
5% to 95% (non-condensing)

Standards Compliance:

- ANSI T1.102-1993
- ANSI T1.107-1995
- GR-820-CORE

Fiber Optics Specifications

For each product listed below in the Ordering Information section, the DISTANCE represents an approximate fiber distance based on industry-standard fiber attenuation specifications. Actual distances will vary for each installation. For complete power budgets and information on calculating specific distances, visit www.imcnetworks.com/Support/fpblookup.cfm or contact IMC Networks Fiber Consulting Services at 949-465-3000.

Ordering Information

PART NUMBER	DESCRIPTION	DISTANCE
IE-iMcV-T1/E1/J1-LineTerm Module		
850-18100	IE-iMcV-T1/E1/J1-LineTerm, TP/SFP §	Varies
iMcV-T1/E1/J1-LineTerm Modules w/ Config Control		
850-18101	iMcV-T1/E1/J1-LineTerm TP/Fiber-MM850-ST	2 km
850-18102	iMcV-T1/E1/J1-LineTerm TP/Fiber-MM850-SC	2 km
850-18103	iMcV-T1/E1/J1-LineTerm TP/Fiber-MM1300-ST	5 km
850-18104	iMcV-T1/E1/J1-LineTerm TP/Fiber-MM1300-SC	5 km
850-18105	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1310/PLUS-ST	40 km
850-18106	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1310/PLUS-SC	40 km
850-18107	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1310/LONG-ST	40 km
850-18108	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1310/LONG-SC	40 km
850-18111	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1550/LONG-SC	80 km
850-18112	iMcV-T1/E1/J1-LineTerm TP/Fiber-SM1550/XLONG-SC	80 km
iMcV-T1/E1/J1-LineTerm Single-Strand Fiber Modules w/ Config Control *		
850-18122	iMcV-T1/E1/J1, TP/SSFiber-SM1310-SC (1550 rcv)	20 km
850-18123	iMcV-T1/E1/J1, TP/SSFiber-SM1550-SC (1310 rcv)	20 km
850-14124	iMcV-T1/E1/J1, TP/SSFiber-SM1310/PLUS-SC (1550 rcv)	40 km
850-14125	iMcV-T1/E1/J1, TP/SSFiber-SM1550/PLUS-SC (1310 rcv)	40 km

PART NUMBER	DESCRIPTION	DISTANCE
iMcV-T1/E1/J1-LineTerm CWDM Fiber Modules		
850-18130	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1310-SC	80 km
850-18131	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1330-SC	80 km
850-18132	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1350-SC	80 km
850-18133	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1370-SC	80 km
850-18134	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1390-SC	80 km
850-18135	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1410-SC	80 km
850-18136	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1430-SC	80 km
850-18137	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1450-SC	80 km
850-18138	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1470-SC	80 km
850-18139	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1490-SC	80 km
850-18140	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1510-SC	80 km
850-18141	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1530-SC	80 km
850-18142	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1550-SC	80 km
850-18143	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1570-SC	80 km
850-18144	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1590-SC	80 km
850-18145	iMcV-T1/E1/J1-LineTerm, TP/Fiber-CWDM-SM1610-SC	80 km

Always deploy *iMcV-T1/E1/J1-LineTerm* converters in pairs.

* *These products have single-strand fiber technology.*
For more information go to: www.imcnetworks.com/products/SSFX.cfm

§ SFP modules are sold separately. For more information on compatible IMC Networks SFPs, go to: www.imcnetworks.com/Products/product.cfm?family=32

IE-SFP Modules: 100 to 155 Mbps (OC-3)

PART NUMBER W/ DDMI	PART NUMBER W/O DDMI	PORT DESCRIPTION	FIBER	DISTANCE	POWER BUDGET (db)
808-38101	808-38111	MM850	LC	2 km	14.5
808-38102	808-38112	MM1300	LC	2 km	15
808-38103	808-38113	SM1310	LC	15 km	13
808-38104	808-38114	SM1310/PLUS	LC	40 km	31
808-38105	808-38115	SM1550/LONG	LC	80 km	31
808-38525	808-38535	SSFX-SM1310/1550/LONG	LC	60 km	31
808-38526	808-38536	SSFX-SM1550/1310/LONG	LC	60 km	31

IMC Networks
Headquarters
19772 Pauling
Foothill Ranch, CA 92610
TEL: 949-465-3000
FAX: 949-465-3020
sales@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
28050 U.S. Hwy. 19 North, Suite 306
Clearwater, FL 33761
TEL: 727-797-0300
FAX: 727-797-0331
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