iMcV-WDM/2

Operation Manual

Warranty

IMC Networks warrants to the original end-user purchaser that this product, EXCLUSIVE OF SOFTWARE, shall be free from defects in materials and workmanship under normal and proper use in accordance with IMC Networks' instructions and directions for a period of six (6) years after the original date of purchase. This warranty is subject to the limitations set forth below.

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To receive in-warranty service, the defective product must be received at IMC Networks no later than the end of the warranty period. The product must be accompanied by proof of purchase, satisfactory to IMC Networks, denoting product serial number and purchase date, a written description of the defect and a Return Merchandise Authorization (RMA) number issued by IMC Networks. No products will be accepted by IMC Networks which do not have an RMA number. For an RMA number, contact IMC Networks at PHONE: (800) 624-1070 (in the U.S and Canada) or (949) 465-3000 or FAX: (949) 465-3020. The end-user shall return the defective product to IMC Networks, freight, customs and handling charges prepaid. End-user agrees to accept all liability for loss of or damages to the returned product during shipment. IMC Networks shall repair or replace the returned product, at its option, and return the repaired or new product to the end-user, freight prepaid, via method to be determined by IMC Networks. IMC Networks shall not be liable for any costs of procurement of substitute goods, loss of profits, or any incidental, consequential, and/or special damages of any kind resulting from a breach of any applicable express or implied warranty, breach of any obligation arising from breach of warranty, or otherwise with respect to the manufacture and sale of any IMC Networks product, whether or not IMC Networks has been advised of the possibility of such loss or damage.

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About the iMcV-WDM/2

The iMcV-WDM/2 module is a passive two-channel protocol and speed independent Wave Division Multiplexer which allows two individual wavelengths to share one fiber — Full-Duplex data travels on 1310nm and 1550nm — virtually doubling the capacity of the installed fiber. Suited for installations where fiber is limited in terms of availability and/or distance, service providers and network managers can easily double their fiber capacity without incurring the costs associated with installing new fiber.

As a protocol independent device supporting all popular communication protocols, the iMcV-WDM/2 module helps service providers and network managers simplify network administration. Enterprise and campus area network administrators can, for example, deploy the iMcV-WDM/2 solution to combine both voice and data traffic over the same duplex fiber between related facilities.

Installing the iMcV-WDM/2

The iMcV-WDM/2 may be installed in any IMC Networks iMediaChassis series chassis or into a MediaChassis series.
1. Remove the blank brackets covering the slots where the module is to be installed, if present, by removing the screws on the outside edges of the bracket.
2. Slide the module into the chassis, via the card guides, until the module is seated securely in the connector.
3. Secure the module to the chassis by tightening the captive screws. Save any "blanks" removed during installation for future use should your configuration requirements change.
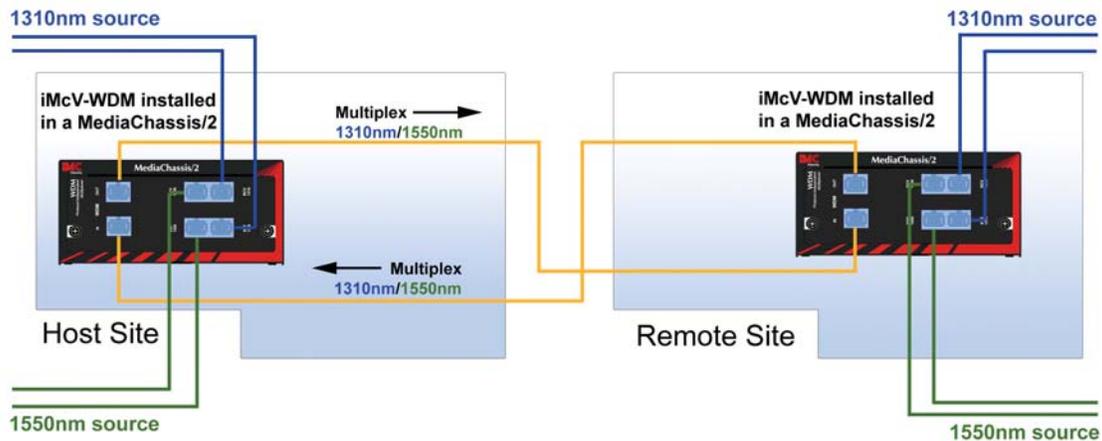
Connecting the iMcV-WDM/2

iMcV-WDM/2 takes two devices of differing wavelengths, transmits the wavelengths along a single strand of fiber, then separates the wavelengths, enabling the fiber optic receivers to receive a signal of the correct wavelength.

When connecting devices to the iMcV-WDM/2, make sure that:
- the wavelengths of each device connected to iMcV-WDM/2 correspond to each other and iMcV-WDM/2 and that
- the fiber transmitters are connected to the fiber receivers.

NOTE
This product has a minimum isolation factor of 17db. This means the difference in launch power between any two inputs to the product should not exceed 17db. In an application where the isolation factor might exceed 17db, it is recommended that attentuators be used, in series, with relationship to the stronger input.

The diagram below illustrates the route that data will take according to the above guidelines. Another path in the opposite direction is needed to complete this installation.

Specifications

Environmental

Operating Temperature
32° - 104° F (0° - 40° C)

Storage Temperature
0° - 160° F (-20° - 70° C)

Humidity
5 - 95% (non-condensing)

Fiber Optic Specifications
Insertion Loss: 1.4dB @ 1550 nm, 1.5 dB @ 1300 nm (Max values)

For fiber optic specifications, please visit:
http://www.imcnetworks.com/adocs/fcs.asp

IMC Networks Technical Support

Tel:	(949) 465-3000 or (800) 624-1070 (in the U.S. and Canada); +32-16-550880 (Europe)
Fax:	(949) 465-3020
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Web:	www.imcnetworks.com

Fiber Optic Cleaning Guidelines

Fiber Optic transmitters and receivers are extremely susceptible to contamination by particles of dirt or dust, which can obstruct the optic path and cause performance degradation. Good system performance requires clean optics and connector ferrules.

1. Use fiber patch cords (or connectors, if you terminate your own fiber) only from a reputable supplier; low-quality components can cause many hard-to-diagnose problems in an installation.

2. Dust caps are installed at IMC Networks to ensure factory-clean optical devices. These protective caps should not be removed until the moment of connecting the fiber cable to the device. Should it be necessary to disconnect the fiber device, reinstall the protective dust caps.

3. Store spare caps in a dust-free environment such as a sealed plastic bag or box so that when reinstalled they do not introduce any contamination to the optics.

4. If you suspect that the optics have been contaminated, alternate between blasting with clean, dry, compressed air and flushing with methanol to remove particles of dirt.

Electrostatic Discharge Precautions

Electrostatic discharge (ESD) can cause damage to any product, add-in modules or stand alone units, containing electronic components. Always observe the following precautions when installing or handling these kinds of products

1. Do not remove unit from its protective packaging until ready to install.

2. Wear an ESD wrist grounding strap before handling any module or component. If the wrist strap is not available, maintain grounded contact with the system unit throughout any procedure requiring ESD protection.

3. Hold the units by the edges; do not touch the electronic components or gold connectors.

4. After removal, always place the boards on a grounded, static-free surface, ESD pad or in a proper ESD bag. Do not slide the modules or stand alone units over any surface.

WARNING! Integrated circuits and fiber optic components are extremely susceptible to electrostatic discharge damage. Do not handle these components directly unless you are a qualified service technician and use tools and techniques that conform to accepted industry practices.
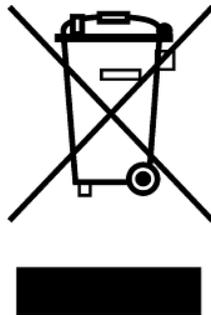
> **Class 1 Laser product, Luokan 1 Laserlaite,**
> **Laser Klasse 1, Appareil A'Laser de Classe 1**

European Directive 2002/96/EC (WEEE) requires that any equipment that bears this symbol on product or packaging must not be disposed of with unsorted municipal waste. This symbol indicates that the equipment should be disposed of separately from regular household waste. It is the consumer's responsibility to dispose of this and all equipment so marked through designated collection facilities appointed by government or local authorities. Following these steps through proper disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about proper disposal, please contact local authorities, waste disposal services, or the point of purchase for this equipment.

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