



## *IE-iMcV-MuxDemux/4*

### *CWDM System*

### *Operation Manual*



## Warranty

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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.

At its option, IMC Networks will repair or replace at no charge the product which proves to be defective within such warranty period. This limited warranty shall not apply if the IMC Networks product has been damaged by unreasonable use, accident, negligence, service or modification by anyone other than an authorized IMC Networks Service Technician or by any other causes unrelated to defective materials or workmanship. Any replaced or repaired products or parts carry a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

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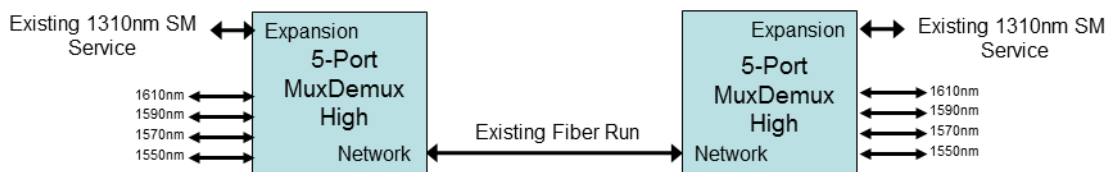
## About the IE-iMcV-MuxDemux/4 CWDM System

The IE-iMcV-MuxDemux/4 has six ports:

Ports	1470-1530nm-LC	1500-1610nm-LC
1	1470nm Fiber Port	1550nm Fiber Port
2	1490nm Fiber Port	1570nm Fiber Port
3	1510nm Fiber Port	1590nm Fiber Port
4	1530nm Fiber Port	1610nm Fiber Port
5	Expansion Port to Daisy Chain Multiple Mux	Expansion Port to Daisy Chain Multiple Mux
6	Network Port	Network Port

The IE-iMcV-MuxDemux/4 is a dual wide module that provides 4 channels of CWDM (Coarse Wavelength Division Multiplexing), an expansion port to allow existing 1310nm fiber, in order to cascade additional units, and a network port. For customers deploying high-end gigabit switches, the IE-iMcV-MuxDemux/4 can provide the growing need for greater bandwidth on fiber. This Industrial Ethernet module has an extended temperature of -40C to +85C.

### Common Application



Add four additional services to an existing 1310nm SM line

## Installing an iMcV-Module

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The IE-iMcV-MuxDemux/4 installs in IMC Networks' iMediaChassis series or in any MediaChassis/2. It occupies 2 slots as it is dual wide.

The IE-iMcV-MuxDemux/4 can be installed in a 2 slot unmanaged chassis:

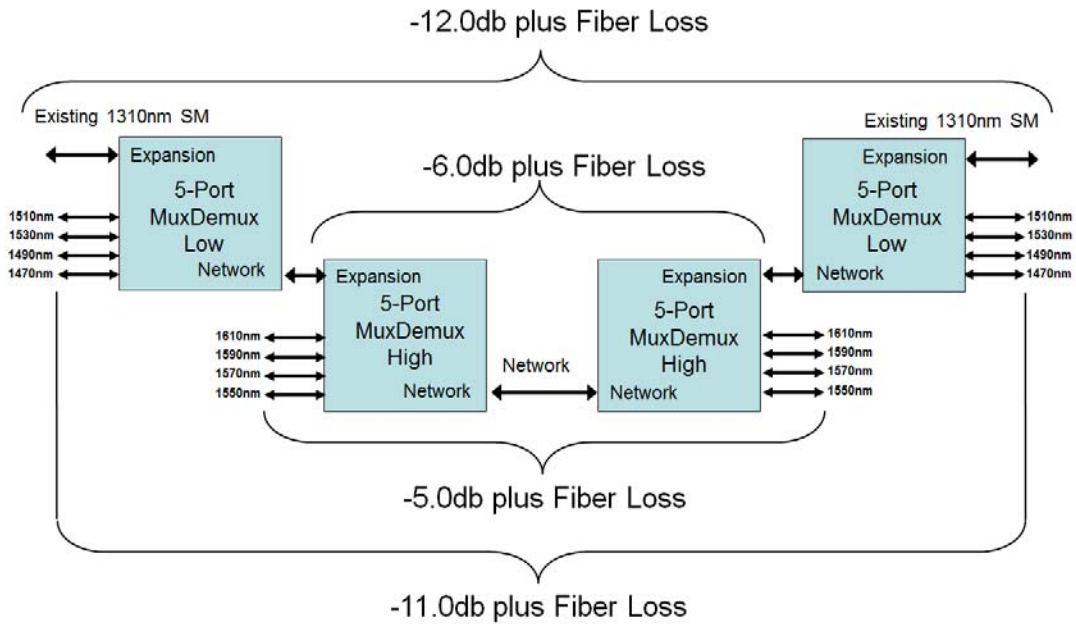
- IE-MediaChassis/2-AC
- IE-MediaChassis2-DC
- MediaChassis/2-AC
- MediaChassis/2-DC

NOTE
All modules are hot-swappable.

To install an IE-iMcV-MuxDemux/4

1. Remove the blank bracket covering the slot where the module is to be installed by removing the screws on the outside edges of the bracket.
2. Slide the IE-iMcV-MuxDemux/4 into the chassis, via the cardguides, until the module is seated securely in the connector.
3. Secure the module to the chassis by tightening the captive screw.
4. Save any "blanks" removed during installation for future use if the configuration requirements change.

## Connecting the IE-iMcV-MuxDemux/4



<p><b>Ports 1-4</b></p>	<p>The IE-iMcV-MuxDemux/4 allows 4 devices of differing wavelengths, transmits the wavelengths along a single fiber, then separates the wavelengths, enabling the fiber optic receivers to receive a signal of the correct wavelength.</p>
<p><b>Port 5</b></p>	<p>Port 5 is an expansion port to allow multiple IE-iMcV-MuxDemux/4 to be daisy chained, or to carry a legacy 1310nm SM fiber link.</p>
<p><b>Port 5 Network Port</b></p>	<p>This port allows two IE-iMcV-MuxDemux/4 to be connected back to back there are no diagnostic LEDs for the IE-iMcV-MuxDemux/4.</p>

## Specifications

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### Fiber Optic (Insert Loss)

3.0dB for CWDM systems using an optical band between 1450nm and 1610nm

NOTE
Unit does not require power to operate!

### Operating Temperature

-40°F to +185°F (-40°C to +85°C)

### Storage Temperature

-40°F to +185°F (-40°C to +85°C)

### Humidity

5 to 95% (non-condensing); 0 to 10,000 ft. altitude

### Dimensions

Dual-wide, two slot chassis module

## **IMC Networks Technical Support**

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**Tel:** (949) 465-3000 or (800) 624-1070 (in the U.S. and Canada);  
+32-16-550880 (Europe)

**Fax:** (949) 465-3020

**E-Mail:** [techsupport@imcnetworks.com](mailto:techsupport@imcnetworks.com)

**Web:** [www.imcnetworks.com](http://www.imcnetworks.com)

## **Fiber Optic Cleaning Guidelines**

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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

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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.

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## Certifications

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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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