

iMcV-WDM/2

Operation Manual



Limited Lifetime Warranty

Effective for products of B&B Electronics shipped on or after May 1, 2013, B&B Electronics warrants that each such product shall be free from defects in material and workmanship for its lifetime. This limited lifetime warranty is applicable solely to the original user and is not transferable.

This warranty is expressly conditioned upon proper storage, installation, connection, operation and maintenance of products in accordance with their written specifications.

Pursuant to the warranty, within the warranty period, B&B Electronics, at its option will:

1. Replace the product with a functional equivalent;
2. Repair the product; or
3. Provide a partial refund of purchase price based on a depreciated value.

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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 B&B Electronics 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.

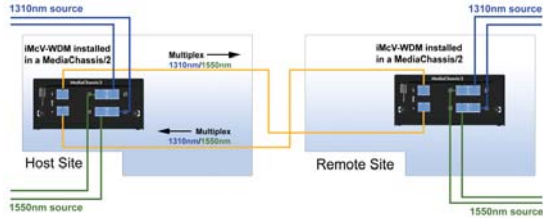
When connecting devices to the iMcV-WDM/2, make sure that:

- 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 attenuators 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)

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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 B&B Electronics 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.

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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.

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Certifications

Class 1 Laser product, Luokan 1 Laserlaitte,
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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