

# IE-MediaChassis/1-DC

## USER MANUAL



**B+B** SMARTWORX

Powered by

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## ABOUT THE IE-MEDIACHASSIS/1-DC

The IE-MediaChassis/1-DC is a stand-alone chassis for use with iMcV modules. As an unmanaged chassis, the IE-MediaChassis/1-DC supports a single-wide iMcV module. All iMcV modules, with the exception of the SNMP management card, will function properly in this chassis.

The IE-MediaChassis/1-DC contains an internal Telco compatible DC power supply.

**NOTE:** Some options require items that are sold separately, available from B+B SmartWorx.

## INSTALLING THE IE-MEDIACHASSIS/1-DC

Use the IE-MediaChassis/1-DC as a table-top chassis, mount in a rackmount shelf, or mount it to a wall surface with rackmount brackets.

1. Install the IE-MediaChassis/1-DC by placing it on a flat surface.
2. If wall mounting the chassis, place two #10 panhead screws (not supplied) on the wall the distance of the holes on the chassis; then hang the unit on the screws.
3. Attach the cables between the chassis and the device that will be interconnected; then plug the unit into a reliable, filtered power source.
4. It is suitable for mounting on concrete or other non-combustible surface only.

**NOTE:** Some options require items that are sold separately (available from B+B SmartWorx). iMcV modules and rackmount kits for IE-MediaChassis/1-DC are sold separately (available from B+B SmartWorx).

## RACKMOUNT PRECAUTIONS

1. Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.
2. Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.
3. Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

4. **Circuit Overloading** - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
5. **Reliable Grounding** - Reliable grounding of rack mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

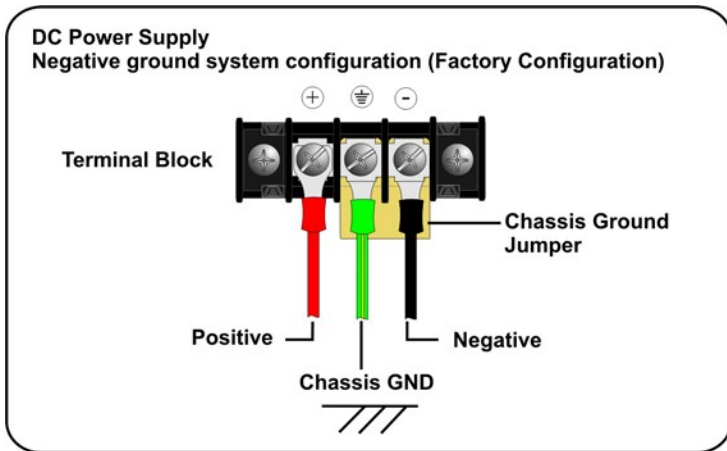
## **CONFIGURING & INSTALLING MODULES**

B+B SmartWorx recommends disconnecting the chassis power before proceeding:

1. To install an iMcV module, slide the module into the chassis until the module is firmly seated in the backplane.
2. Secure the module to the chassis by tightening the captive thumb-screw on the iMcV module.
3. Attach the network cables between the iMcV module and other devices that will be interconnected.
4. Connect the DC power source.

## DC POWER SUPPLY WIRING INSTRUCTIONS

The following diagram shows the wiring configuration for a 48VDC power supply in a negative-ground system application. For positive-ground system applications, remove the chassis ground shorting jumper and connect it between the positive terminal and the chassis ground terminal. Alternatively, the chassis grounding jumper can be eliminated and the chassis ground connected at the power source.



**NOTE:** Incorrect wiring will result in chassis malfunction. The IE-MediaChassis/1-DC is compliant with Isolated Grounding Plane practices. The POSITIVE and NEGATIVE terminals are isolated from chassis ground and must have a ground reference at the power-sourcing equipment.

This equipment is designed to permit the connection of the grounded conductor of the DC supply circuit to the grounded conductor at the equipment. If this connection is made, all of the following conditions must be met:

1. This equipment shall be connected directly to the DC supply system grounded electrode conductor or to a bonding jumper from a grounded terminal bar or bus to which the DC supply system grounding electrode conductor is connected.
2. This equipment shall be located in the same immediate area (such as adjacent cabinets) as any other equipment that has a connection between the grounded conductor of the same DC supply circuit and the grounding conductor, and also the point of grounding of the DC system. The DC system shall not be grounded elsewhere.

3. The DC supply source shall be located within the same premises as this equipment.
4. Switching or disconnecting devices shall not be in the grounded circuit conductor between the DC source and the point of connection of the grounding electrode conductor.

## DC POWER SUPPLY PRECAUTIONS

The following precautions must be observed when installing this chassis:

1. Check nameplate ratings to ensure that there is no overloading of supply circuits that could effect over current protection and supply wiring.
2. In addition, the following must be observed:
  - a. Connect the equipment to a 35 to 75 VDC power source that is electrically isolated from the alternating current source.
  - b. Route input wiring to terminal block and secure in such a manner that it is protected from damage and stress. Do not route wiring past sharp edges or moving parts.
  - c. Incorporate a readily accessible disconnect device with a 3mm minimum contact gap in the fixed wiring.
  - d. Install only in Restricted Access Areas (dedicated equipment rooms, equipment closets, etc.) in accordance with Articles 110-18, 110-26, and 110-27 of the National Electric Code, ANSI/NFPA 70.
  - e. Provide a listed circuit breaker suitable for branch circuit protection of the wiring and rated maximum 1A @ 48 VDC.
  - f. For supply connections, use wires suitable for at least 75 ° C

**SPECIFICATIONS****Environmental**

Operating Temperature: -35 to 80 °C (-31 to 176 °F)

Storage Temperature: -55 to 125 ° =C (-67 to 257 °F)

Humidity: 5 to 95% (non-condensing)

**DC Input**

Input Voltage: 35 to 75 VDC

Input Current: 500 mA, maximum

iMcV Slot Current Source Capability: 2A @ +5VDC

**Dimensions**

3.7H x 12.1W x 18.6D cm (1.45H x 4.75W x 7.30D in)

**Heat Generation**

4 BTU/hr., maximum



**B+B SMARTWORX TECHNICAL SUPPORT**

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**STATEMENTS, GUIDELINES, PRECAUTIONS****FCC RADIO FREQUENCY INTERFERENCE STATEMENT**

This equipment has been tested and found to comply with the limits for a Class A computing device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

The use of non-shielded I/O cables may not guarantee compliance with FCC RFI limits. This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

## 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 the factory 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 your add-in modules. Always observe the following precautions when installing or handling an add-in module or any board assembly.

1. Do not remove unit from its protective packaging until you're ready to install it.
2. Wear an ESD wrist grounding strap before handling any module or component. If you do not have a wrist strap, maintain grounded contact with the system unit throughout any procedure requiring ESD protection.
3. Hold boards by the edges only; 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 board 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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## STANDARDS/COMPLIANCES

- UL/cUL: Listed to Safety of Information Technology Equipment, including Electrical Business Equipment.
- CE: The products described herein comply with the Council Directive on Electromagnetic Compatibility (2004/108/EC) and the Council Directive on Electrical Equipment Designed for use within Certain Voltage Limits (2006/95/EC). Certified to Safety of Information Technology Equipment, Including Electrical Business Equipment. For further details, contact B+B SmartWorx.



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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