microNID™
Quick Start Guide

Product Overview

The iConverter microNID is a compact and cost-effective Network Interface Device (NID) that enables the delivery of low-latency, service-assured Business Ethernet, 4G/LTE macro cell and metro/small cell backhaul services.

The mircoNID is a 2-port module. It is available with two SFP ports, two RJ-45 ports or one SFP and one RJ-45 port. The SFP port supports 100BASE-X or 1000BASE-X fiber transceivers, 100/1000BASE-T and 1000BASE-T copper transceivers. The RJ-45 ports support 100/1000Mbps bridging, with auto-negotiation for data-rate and duplex mode. The RJ-45 ports also support auto MDI/MDI-X, eliminating the need for crossover cables.

Depending on the model, the microNID is compatible with IEEE 802.3af, IEEE 802.3at and most 60W power source equipment. It supports Alternate A and B powering modes.

Powering Mode	10/100/1000 RJ-45 (Port 2)
IEEE Alternate A (Alt A)	Vport Positive - pins 1,2 Vport Negative - pins 3,6
IEEE Alternate B (Alt B)	Vport Positive - pins 4,5 Vport Negative - pins 7,8

Management can be accessed through the optical and electrical ports, allowing it to be installed and managed anywhere along the service path. For local management, the microNID has a serial console interface on the rear of the module.

Installation Procedure

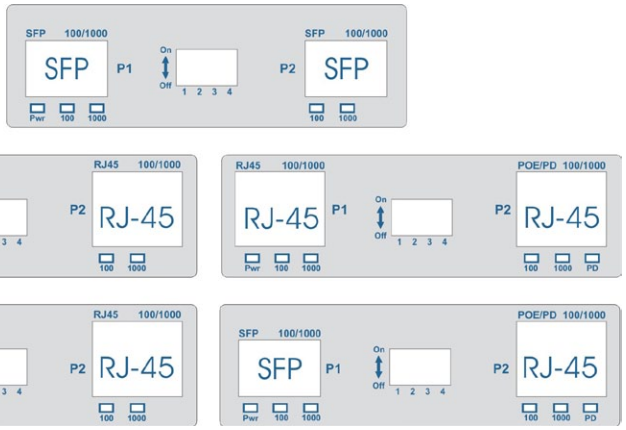
1) Port Operation

2) Install Standalone Module and Connect Cables

3) Verify Operation

1) PORT OPERATION

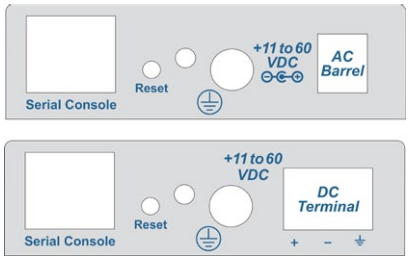
The front of the module supports a combination of SFP and RJ-45 connectors (depending on the model). Four (4) DIP-switches are also accessible from the front of the module.



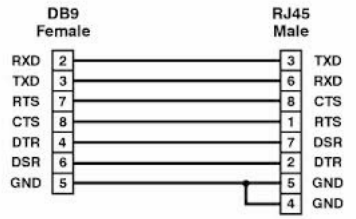
The DIP-switches are defined in the table below.

Switch	Function	Down	Up
1	Reserved	Off	On
2	Reserved	Off	On
3	Reserved	Off	On
4	Reserved	Off	On

The rear of the module supports a RJ-45 serial console port, reset button and power connectors.



The serial console port is a standard RS-232 asynchronous serial interface. The serial adapter cable pin-outs are illustrated below.



The serial console port supports a speed of 57,600, 1 stop bits, 8 data bits and no parity or flow control.

Depressing and holding the Reset Button for 10 seconds will restore the module to the factory default settings.

2) INSTALL STANDALONE MODULE AND CONNECT CABLES

a. The microNID is available with integrated mounting brackets. For wall-mounting, use the integrated mounting brackets to attach the microNID to a wall, backboard or other flat surface. For tabletop installations, place the unit on a flat level surface. Attach the rubber feet to the bottom of the microNID to prevent the unit from sliding. Make sure the unit is placed in a safe, dry and secure location.

   To power the unit using the AC/DC adapter, connect the AC/DC adapter to an AC outlet. Then connect the barrel plug at the end of the wire on the AC/DC adapter to the 2.5mm DC barrel connector (center-positive) on the unit. Confirm that the unit has powered up properly by checking the power status LED located on the front of the unit.

   To power the unit using a DC power source, prepare a power cable using a two conductor insulated wire (not supplied) with a 14 AWG gauge minimum. Cut the power cable to the length required. Strip approximately 3/8 of an inch of insulation from the power cable wires. Connect the power cables to the unit by fastening the stripped ends to the DC power connector.

Connect the power wires to the DC power source. The Power LED should indicate the presence of power.

WARNING: Note the wire colors used in making the positive and negative connections. Use the same color assignment for the connection at the DC power source.

A 'P' clamp is included to provide strain relief for the power cable.

NOTE: A safety ground attachment is provided on the rear of the module. Use the provided ground screw to attach a safety ground.

To power the unit with PoE, connect the RJ-45 port (P2) of the microNID to a 100BASE-TX or 1000BASE-T PoE capable Ethernet device, via a category 5 or better cable.

3) VERIFY OPERATION

Once the module has been installed and configured per steps 1 and 2, verify the module is operational by viewing the LED indicators.

LED Function "Legend"	Color	OFF State	ON/Blinking State
Power "PWR"	Green	No power	**Solid Green:** Module has power
P1 Link Activity "100"	Green	Port not linked at 100M	**Solid Green:** Port linked at 100M **Blinking Green:** Data activity
P1 Link Activity "1000"	Green	Port not linked at 1000M	**Solid Green:** Port linked at 1000M **Blinking Green:** Data activity
P2 Link Activity "100"	Green	Port not linked at 100M	**Solid Green:** Port linked at 100M **Blinking Green:** Data activity
P2 Link Activity "1000"	Green	Port not linked at 1000M	**Solid Green:** Port linked at 1000M **Blinking Green:** Data activity
P2 PoE Power "PD"	Green	No PoE Power is detected	**Solid Green:** PoE Power is detected

NOTE: A DDMI error will turn all LEDs to amber.

Warranty

This product is warranted to the original purchaser against defects in material and workmanship for a period of two (2) years from the date of shipment. A LIFETIME warranty may be obtained by the original purchaser by registering this product within ninety (90) days from the date of shipment at www.omnitron-systems.com/support. During the warranty period, Omnitron will, at its option, repair or replace a product which is proven to be defective with the same product or with a product with at least the same functionality.
For warranty service, the product must be sent to an Omnitron designated facility, at Buyer's expense. Omnitron will pay the shipping charge to return the product to Buyer's designated US address using Omnitron's standard shipping method.

Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from improper or inadequate use and/or maintenance of the equipment by Buyer, Buyer-supplied equipment, Buyer-supplied interfacing, unauthorized modifications or tampering with equipment (including removal of equipment cover by personnel not specifically authorized and certified by Omnitron), or misuse, or operating outside the environmental specification of the product (including but not limited to voltage, ambient temperature, radiation, unusual dust, etc.), or improper site preparation or maintenance.

No other warranty is expressed or implied. Omnitron specifically disclaims the implied warranties of merchantability and fitness for any particular purpose.

The remedies provided herein are the Buyer's sole and exclusive remedies. Omnitron shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any legal theory.

Environmental Notices

The equipment covered by this manual must be disposed of in accordance with Directive 2002/96/EC of the European Parliament and of the council of 27 January 2003 on waste electrical and electronic equipment (WEEE). Such disposal must follow national legislation for IT and Telecommunication equipment in accordance with the WEEE directive: (a) Do not dispose waste equipment with unsorted municipal and household waste. (b) Collect equipment waste separately. (c) Return equipment using collection method agreed with Omnitron.

The equipment is marked with the WEEE symbol to indicate that it must be collected separately from other types of waste. In case of small items the symbol may be printed only on the packaging or in this manual. If you have questions regarding the correct disposal of equipment go to www.omniton-systems.com/support or e-mail to Omnitron at intlinfo@omnitron-systems.com.

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