

Installation Guide

1 Unpacking

Open the carton and unpack the items. Your package should include an EL1142 media converter and this Quick Install Guide. If items are missing or damaged, notify your EtherWAN representative.

Download the full manual at:

<https://www.etherwan.com>



2 Select Installation Location

Installation is DIN-rail, panel, rack mounting, or wall (in an enclosure or industrial panel). Ensure that the power source is within 6 feet (1.8 meters), and check that there is adequate airflow. Place the media converter on the DIN rail from above using the slot. Push the front of the media converter toward the mounting surface until it audibly snaps into place.

3 Connect Power

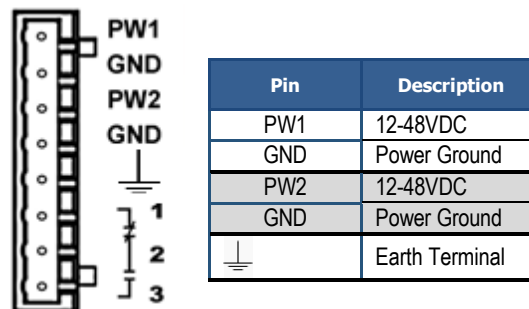
The media converter is equipped with an eight-contact terminal block. The terminal block provides dual DC power inputs, and a relay output contact. Redundant power supply is supported, but only one power input is required for operation. Note that the media converter does not have a power switch; it is turned on/off by connecting/disconnecting power.

Input voltage is **12 to 48VDC**.

The power dissipation under full load is as follows:

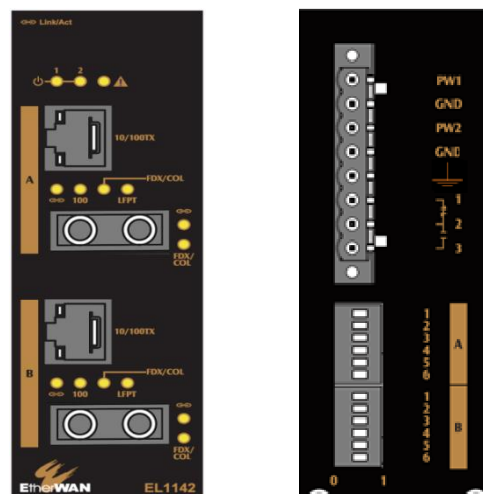
- 12V/0.4A, 24V/0.19A, 48V/0.11A

Note: Use qualified power supply by SELV or double insulation of UL 60950 or UL 61010-1 or UL 61010-2-201 standards.



Insert the DC input wires into the corresponding terminals, and tighten the clamp screws to hold them in place. Make sure that the plastic terminal block connector prongs are plugged firmly into the terminal block receptacles.

4 Front Panel Reference



The EL1142 front panel LEDs show power and link/activity status. The table below summarizes the LED indicator functions.

5 LED Indicators

LED	State	Indication
Fault (Red)	Steady	Power redundancy or port malfunction
	Off	Power redundancy and ports functioning normally
Power1 (Green)	Steady	Power 1 on
	Off	Power 1 off
Power2 (Green)	Steady	Power 2 on
	Off	Power 2 off
100 (Mbps)	Steady	Connection at 100Mbps
	Off	Connection at 10Mbps
LFPT (Green)	Steady	LFPT function enabled
	Off	LFPT function disabled
LNK/ACT (Green)	Steady	Network connection established
	Flashing	Transmitting or receiving data
	Off	No valid network connection established
FDX/COL (Green)	Steady	Full duplex mode
	Flashing	Collision occurred
	Off	Half-duplex mode

6 DIP Switch Settings

Port, power and LFPT settings are made very simple by means of two sets of six DIP (Dual Inline Package) switches on the top panel of the hardened media converter. Default position for all DIP switches is '0'.

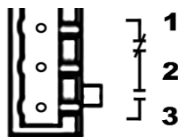
No.	0	1
1	Disable LFPT	Enable LFPT
2	Enable Auto Negotiation for TX port	Enable Forced Mode for TX port
3	TX port forced to 100Mbps	TX port forced to 10Mbps
4	TX port forced to full duplex mode	TX port forced to half duplex mode
5	FX port forced to full duplex mode	FX port forced to half duplex mode
6	Disable link down alarm	Enable link down alarm

* LFPT=Link Fault Pass Through

If Force mode is enabled, the media converter must be restarted in order for the new setting to take effect.

7 Relay Output Alarm

The media converter is equipped with relay output contacts on the terminal block for signaling of a power or port failure. The relay output can be connected to an alarm signaling device. Current is 0.6A @ 30VDC. Default is PW1 and PW2 both off and points 2 & 3 open.

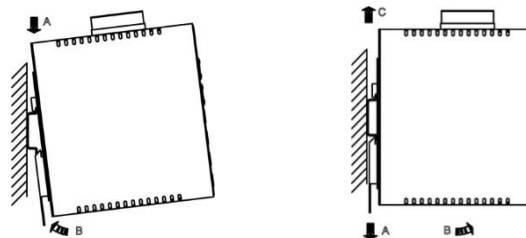


Relay contact	PW1	PW2	Point 1 - 2	Point 2 - 3
Alarm	Off	Off	Closed	Open
Alarm	Off	On	Closed	Open
Alarm	On	Off	Closed	Open
Non-Alarm	On	On	Open	Closed

8 Other Information

DIN-Rail Assembly Startup, and Dismantling

- Assembly: Place the device on the DIN rail from above using the slot. Push the front of the device toward the mounting surface until it audibly snaps into place.
- Startup: Connect the supply voltage to start up the device via the terminal block.
- Dismantling: Pull out the lower edge and then remove the device from the DIN rail.



Power wiring information:

Use cable type - AWG (American Wire Gauge) 18-24 and the corresponding pin type cable terminals.

Use torque value 1.7 lb-in, do not use excessive force when fixing wiring.



The rating of wire must be 105 °C at least.

- Label clean up:
Indoor use and pollution degree II, it must be wiped with a dry cloth for clean up the labelling.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- The media converter shall be mounted in an industrial control panel and ambient temperature is not exceed 75 degrees Celsius

Manufacturer information:

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- Altitude up to 2000 m
- Humidity range (Operational): 5% to 95%, non-condensation
- The product is open type
- The product is for indoor use