

1 Unpacking

Open the carton and unpack the items. Your package should include:

- One ED3538T (Transmitter) or ED3538R (Receiver) Ethernet Extender

If any items are missing or damaged, notify your EtherWAN representative. If possible, save the carton and packing material in case you need to ship or store the device in the future.

2 Select a Location

- Installations: DIN-Rail mount
- Choose a dry area with ambient temperature between -40 and 75°C (-40 and 167°F).

Note: The equipment is designed for indoor installation and is not intended to be connected to exposed (outside plant) networks including campus environment or equivalent.

3 Apply Power

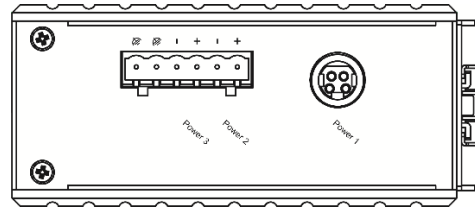
DC Terminal Block Power Inputs

- There are two sets of DC terminal blocks for power input. While redundant power is supported, only one power input is required. Input voltage is 2.5A @ 48VDC (Peak current 3.26A).

DC Jack Power Input:

- Voltage is 2.5A @ 48VDC (Peak current 3.26A).

Warning: Do not connect ED3538 Transmitter and Receiver to the same power source. Devices may be damaged due to power loopback through the PoL linked via copper wire.



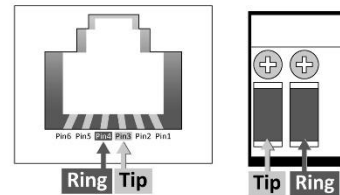
Power Input Assignment			DC Jack
Power1		48VDC	
Power2	+	T: 46-57VDC R: 46-57VDC	Terminal Block
	-	Power Ground	
Power3	+	T: 46-57VDC R: 46-57VDC	
	-	Power Ground	
		Earth Ground	

4 Connection and Setup

Ethernet Extender Connection

The RJ-11 and Terminal Block port pinouts
Pin 3: Tip, Pin 4: Ring.

Use a telephone line to connect two RJ-11 or Terminal Block ports between two ED3538 devices.



Note: Disconnect the device power before I/O or DIP switch configuration.

PoL (Power over Link) Mode Enable

- Ensure all power sources are disconnected from ED3538T and ED3538R.
- Ensure ED3538T PoL (Power over Link) DIP switch is in On position (Up position).
- Set ED3538T Type DIP switch to Perf (Performance, Up position) to acquire better Line Speed (but poor noise immunity). Or sets Type DIP switch of ED3538T to Std (Standard, Down position) to acquire standard Line Speed (but better noise immunity).
- Set ED3538R mode to Rmt on DIP switch (Remote, Up position).
- Connect one end of the one pair copper wire to RJ-11 phone jack or 2-pin Terminal Block interface of the ED3538T and the other end to RJ-11 phone jack or 2-pin Terminal Block interface of the ED3538R.
- Connect power source to ED3538T.
- Data and power can be delivered from ED3538T, and at the same time through one pair copper wire to turn on and communicate with ED3538R.

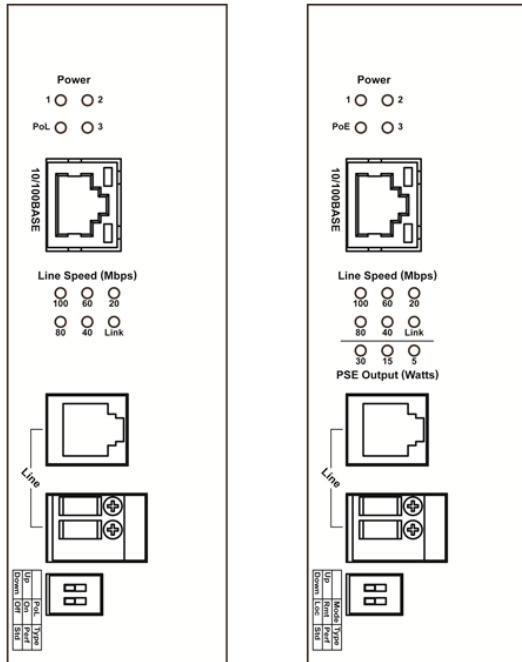
PoL (Power over Link) Mode Disable

For longer distance (e.g. over 1.4km) extension application, ED3538R may not be able to receive power from ED3538T. A separate power source will need to be applied on ED3538R.

- Ensure all power sources are disconnected from ED3538T and ED3538R.
- Ensure ED3538T PoL (Power over Link) DIP switch is in Off position (Down position).

- Set ED3538T Type DIP switch to Perf (Performance, Up position) to acquire better Line Speed (but poor noise immunity). Or sets Type DIP switch of ED3538T to Std (Standard, Down position) to acquire standard Line Speed (but better noise immunity).
- Connect power source to ED3538T.
- Check if ED3538R Mode is set to Rmt on DIP switch (Remote, Up position).
- Connect power source to ED3538R.

5 LED Indicators



LEDs	State	Indication
Power 1/2/3	Steady	Power received
	Off	Power off
PoL	Steady	Power Ethernet extension interface function is enabled
	Off	No power is transmitted over Ethernet extension interface
PoE	Steady	Powered device (PD) is connected
	Off	Powered device (PD) is disconnected
Link	Steady	Valid Extender connection established
	Fast Flashing	Data transmission or receiving
	Slow Flashing	Extender port in negotiation mode
	Off	Extender interface connection is not established
Line Speed	Steady	Displays the link speed in Mbps
PSE Output	Steady	PoE power can be transmitted for PD
	All off	No PoE power can be transmitted for PD
Green	Steady	Valid Ethernet connection established
	Flashing	Data transmitting or receiving
	Off	No Ethernet connection established
Yellow	Steady	Link speed at 100Mbps
	Off	Link speed at 10Mbps

6 DIP Switch Settings

DIP Switch	Down	Up
ED3538T		
PoL	Disable Power over Link	Enable Power over Link
Type	Std (Standard) Better noise immunity	Perf (Performance) Better line speed Poor noise immunity
ED3538R		
Mode	Loc (Local), Set ED3538R to Local Mode	Rmt (Remote), Set ED3538R to Remote Mode
Type	Std (Standard) Standard line speed Better noise immunity	Perf (Performance) Better line speed Poor noise immunity

Manufacturer information:

EtherWAN Systems, Inc.

33F, No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City, 221 Taiwan

The full product manual can be downloaded from:

www.etherwan.com

