

## 1 Unpacking

Unpack the items. Your package should include:

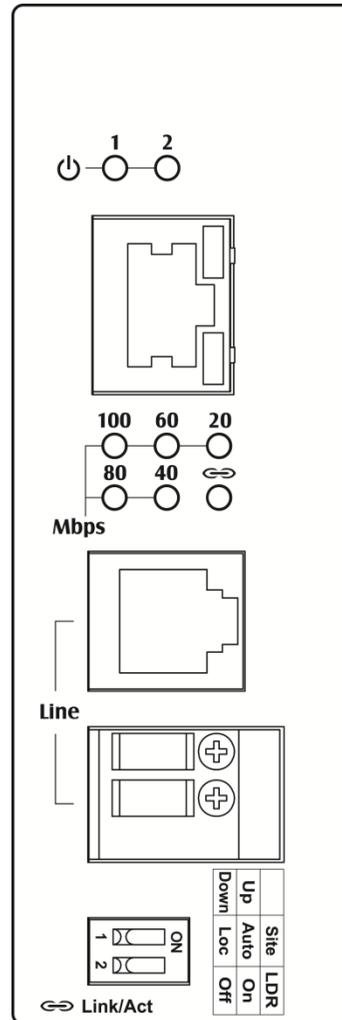
- One ED3541 Industrial Ethernet Extender
- One CD containing this user's guide

If items are missing or damaged, notify your EtherWAN representative. Keep the carton and packing material.

## 2 Select a Location

- Installations: Desktop, DIN-Rail mount.
- Identify a power source within 6 feet (1.8 meters).
- Choose a dry area with ambient temperature between -40 and 75°C (-40 and 167°F).
- Keep away from heat sources, sunlight, warm air exhausts, hot-air vents, and heaters.
- Be sure there is adequate airflow.
- Keep the device at least 6 ft (1.83 m) away from the nearest source of electromagnetic noise, such as a photocopy machine.

## 3 Connect to the Data Ports



LED	Color	Status
 Power 1, 2	Green	ON = Receiving power.
		OFF = Power off.
<b>Ethernet Extender Port</b>		
 Link/Activity	Green	ON = Connection is established.
		OFF = No connection is established.
		Flashing = Port is sending or receiving data.
Line Speed	Green	ON = Displays the link speed in Mbps.
<b>10/100TX Port</b>		
Link/Activity	Green	ON = Valid network connection.
		OFF = No data transmission on port.
		Flashing = Port is sending or receiving data.
Speed	Yellow	ON = Link speed at 100Mbps.
		OFF = Link speed at 10Mbps.

- Insert one end of the Ethernet cable into a switch port.
- Connect the other end into the Ethernet port of the device.
- Insert the voice grade copper wire between one pair of Ethernet Extenders via Ethernet Extender port (RJ-11 connector or Terminal Block).

Distance and data rates for Ethernet Extender ports:

Distance (m)	Data Rate (Mbps)
300	100
400	80
600	60
800	40
2600	1

This distance/data rate information is measured according to testing standards in the EtherWAN laboratory. The actual installation and connection speed will be affected by the quality of copper wire and the impact of noise disturbance.

## 4 DIP Switch

Pin	Up	Down
DIP Switch 1 (Site)	Auto mode	Local mode
DIP Switch 2 (LDR)	Turn on link down relay	Turn off link down relay

Auto mode: This is the factory default setting. The Extender will automatically select the Extender port to operate in Local or Remote mode.

Local mode: Operation mode of the Extender is fixed as Local mode.

A pair of Extenders can only have one Extender set to Local mode.

Connection establishment time for Extender port:

- One Extender is set as Local mode, the other is set as Auto mode: Around 40 seconds.
- A pair of Extenders are set to Auto mode: Connection establishment time may be longer, sometimes the connection establishment time may be up to a few minutes.

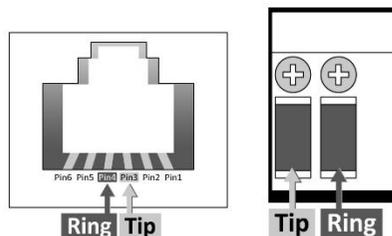
**NOTE:** After making changes to the position of any DIP switch, the Ethernet Extender must be rebooted for the new settings to take effect.

## Ethernet Extender Connection

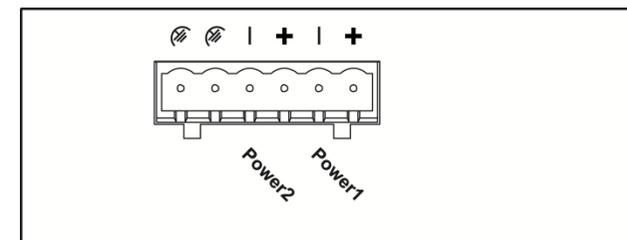
The RJ-11 and Terminal Block port pinouts

Pin 3: Tip, Pin 4: Ring.

Use a telephone line to connect two RJ-11 or Terminal Block ports between two Hardened Ethernet Extenders.



## 5 Apply DC Power



- Connect the DC power cord to the plug-able terminal block on the Ethernet Extender, and then plug it into a standard DC outlet.
- Connect the ground connection from the terminal block to the grounding surface.