

LRA-900-E

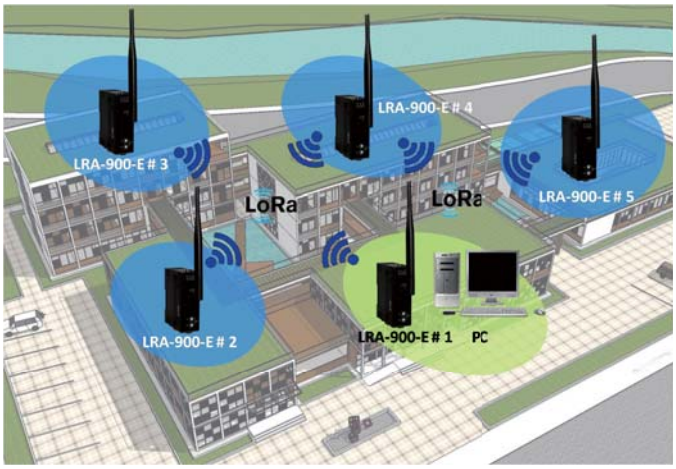
Ethernet to LoRa Radio Modem

Features

- LoRa (Long Range) transmission technology
- 32 RF channels (Frequency band : 864~ 871.5MHz, 915~ 922.5MHz)
- 7 RF baud rates (10000 ~ 250 bps)
- Wireless line of sight (LOS) transmission range of up to 1500 meters at an RF baud rate of 1000 bps
- Data transmission via Virtual COM or raw TCP connection
- Tiny Web server for configuration (HTTP)
- Supports TCP server-mode operation
- Supports UDP responder for device discovery (UDP Search)

Introduction

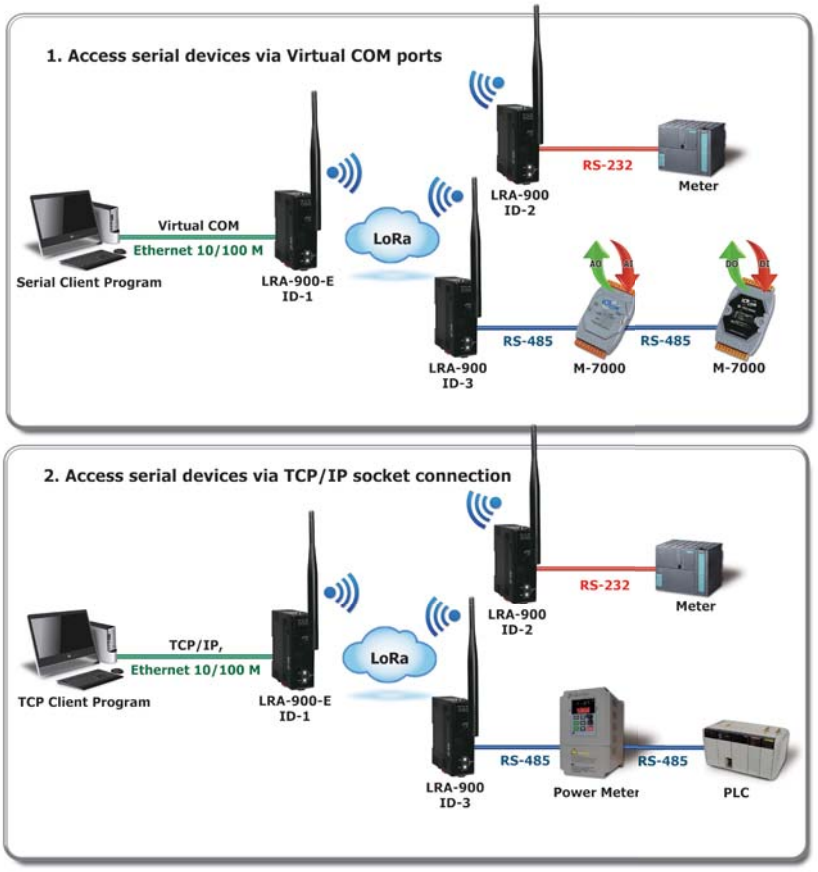
The LRA-900-E is a Ethernet to radio device designed for remote communication operating in a transparent way and exploiting the physical layer of LoRa (Long Range) transmission technology. By using the VxComm Driver/Utility, the built-in RF port of the LRA-900-E can be virtualized to a standard PC COM Port in Windows. Therefore, users can transparently access RF datas over the Internet/Ethernet via COM Port program. The LRA-900-E provides a maximum line of sight (LOS) transmission distance of 1500 meters at an RF bit rate less than 1000 bps. In order to overcome the interference that may be encountered in harsh environments, the LRA-900-E allows the RF transmission bit rate to be configured to a minimum of 250 bps, enhancing the capability of the modem to resist noise and other interference.



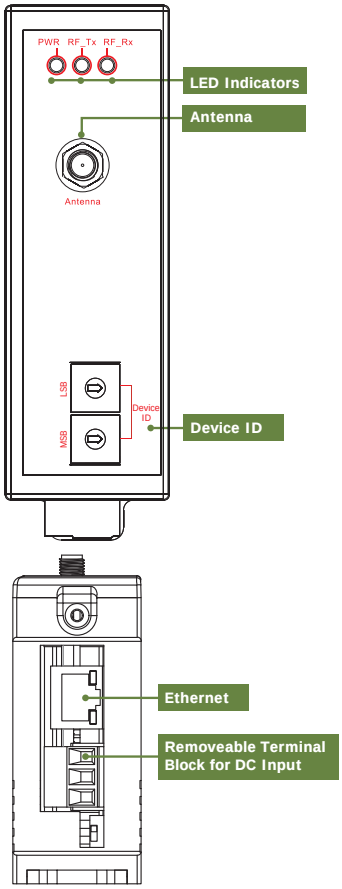
Specifications

RF Interface	
Radio Frequency	864~ 871.5MHz, 915~ 922.5MHz (channel: 32, recommend using 868 +/- 4 MHz)
Baud Rate	10,000 ~ 250 bps
Transmission Power	15 dBm (Max.)
Antenna	2 dBi Omnidirectional Antenna
Transmission Distance	up to 1500 m (with 1000 baud, in free field conditions)
Group ID	0~255
Protocols	Transparent transmit
Configuration	Web Server
Ethernet Interface	
Ethernet	10/100 Base-TX, 8-pin RJ-45 x 1, (Auto-negotiating, Auto-MDI/MDIX, LED indicator)
LED Indicators	
Red / Green / Yellow	Power / RF Tx / RF Rx Status
Power	
Required Supply Voltage	+10 VDC ~ +30 VDC
Power Consumption	1.5 W (Max.)
Mechanical	
Dimensions (W x L x H)	110 mm x 83 mm x 33 mm (not include antenna)
Installation	DIN-Rail
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +80 °C
Relative Humidity	10 ~ 90% RH, Non-condensing

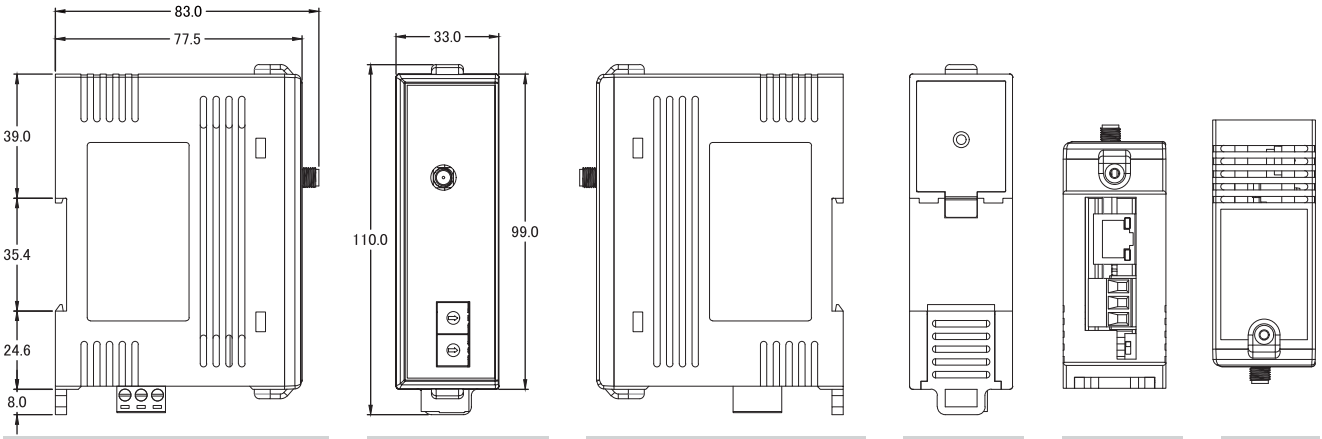
Applications



Appearance



Dimensions (Units: mm)



Left Side View | Front View | Right Side View | Rear View | Bottom View | Top View

Ordering Information

LRA-900-E CR	Ethernet to LoRa Radio Modem (RoHS)

Accessories

ANT-109-01	2 dBi, 824 ~ 960 MHz External Antenna