## MICROSTAR

# MSM-485-RF-LR

## Wireless LoRa RF Module

### Hot-Pluggable Module for Smart Meters



Microstar Electric Company L

#### FEATURES

- RF 433MHz module for RF Star network wireless connection to EDAT
- Industrial grade adapter with superior reliability and durability
- -40°C~+80°C temperature range suitable for indoor & outdoor install
- Hot-pluggable RJ-45 plug interface, with RJ45 socket for daisy chain
- Powered by meter without needing separate power supply
- Compatible with DLMS/COSEM, IEC 62056-21 or MODBUS protocol
- Power and network status LED for easy diagnostics
- Easy daisy chain meters using RJ45 socket and Black Daisy Chain cable, daisy chain up to 30 meters, note EDAT capacity is 80 meters in total: depending on network requirement

#### TECHNICAL SPECIFICATIONS

Frequency	433 MHz
Sensitivity	-148dBm
Maximum Transmission Power	25mW
Antenna Connector	SMA
Instantaneous Current	Max. 2A
Working Current	210 mA
Waiting Current	2.5 mA
Working Voltage	4.6V~ 13.2V (5V / 12V recommended) TCP/IP,
Transport/Network Protocol	UDP
Application Layer Protocol	DLMS/COSEM, IEC 62056-21, or MODBUS RJ-45
Connector	RJ45 Plug lead for local meter connection & RJ45
	Socket for Daisy Chaining Meters

#### APPLICATION

- Local RF network AMR Solutions
- Microstar P2000-T, P2000-D or C2000 series smart meters
- Local network for up to 80 meters
- Typical Vertical network range 5-7 floors
- Typical Horizontal network range 200mtrs outside, 100mtrs inside

#### BENEFITS

- Reliable industrial grade module
- CE, ACMA Certificated
- RJ45 socket for local network, daisy chain up to 30 meters
- Good signal reception w/ special EMI/EMC design
- Modular design for maximum flexibility (easy interchange with other modules)



(back view)

(side views)