

# RMA PLUS Remote Access Module

## Watlow's New RMA PLUS Remote Access Module Offers Plug and Play Access to Powerful EZ-ZONE® RM Family

Watlow's new RMA PLUS remote access module supports Watlow's powerful EZ-ZONE® RM temperature controller family by communicating with and providing access to all EZ-ZONE RM modules in a system.

EZ-ZONE RMA users have had to spend more time than desired to connect their entire system. Now the RMA PLUS offers standard state-of-the-art connectivity from the device to the entire system. Real-time communication is possible via a built-in Ethernet switch or USB. Users can also connect to third-party and legacy devices because the RMA PLUS acts as a gateway between Modbus® TCP and Modbus® RTU.

The device comes standard with a built-in managed Ethernet switch with two Ethernet jacks. Up to three Modbus® TCP sessions, three Watbus over Ethernet sessions and one Watbus over USB session is available in a single device. Users can also log up to 16 gigabytes of data standard or upgrade to a maximum of 32 gigabytes. Configuration and data logs are available as Windows® files so they can be easily accessed. In addition, discovery and transfer speeds have gone from minutes with the legacy EZ-ZONE RMA to just seconds with the RMA PLUS.

Because the RMA PLUS is an essential component of the EZ-ZONE RM family, users receive all the benefits and support of working with Watlow®.



### Features and Benefits

#### Plug and play access to EZ-ZONE RM family

- Integrates easily into existing systems

#### Built-in Ethernet switch

- Eliminates the need to provide a switch for small systems
- Offers port mirroring for troubleshooting
- Protects from broadcast and multicast storms

#### Integrated USB connection

- Provides easy connection from PC with no converter
- Ensures real-time communication from software packages

#### EtherNet/IP® Server Option

- Allows users to set up implicit and explicit messaging for reading and writing values and settings
- Connects to programmable logic controllers and other third-party devices

#### Modbus® TCP and Modbus® RTU

- Allows users to build tables based on individual needs
- Connects to third-party and legacy devices

#### Data logging

- Offers users the opportunity to log any data point in the system

#### TFTP (Trivial File Transfer Protocol) client

- Automates archiving of data log files with user supplied TFTP server

#### MQTT (Message Queuing Telemetry Transport) client

- Standard messaging protocol for the Internet of Things (IoT)
- Allows publishing of data to other clients

#### Customizable default settings

- Loads your RMA PLUS parameter settings whenever the device is reset to factory defaults

## Specifications

(Select a RMA PLUS module for communication protocol options, data logging and system configuration)

### Interoperable with:

- EZ-ZONE RM (C, E, H, L, S) version 9.0+ (inter-module bus)
- EZ-ZONE RM (A, C, E, H, L, S) (Watlow standard bus)
- EZ-ZONE PM, RUI, ST (Watlow standard bus)
- EZ-ZONE RM (F, G, UH, Z)
- POWERGLIDE®
- ASPYRE® AT

### Line Voltage/Power

- Power consumption: 4 W, 9VA
- Any external power supply used should comply with a Class 2 or SELV rating

### Isolated Serial Communications

- All modules ship with standard bus protocol for configuration and communication connection to all EZ-ZONE products

### Standard Communication

- Standard bus over Ethernet (gateway to inter-module bus)
- Standard bus over USB (gateway to inter-module bus)
- Standard bus via serial ('C' connector)
- Modbus® TCP
- Telnet server for standard IT diagnostics
- DNS (Domain Name Server) client maintains connection in applications with dynamic IP addresses

### Additional Communication Options

- EIA 232/485, Modbus® RTU
- EtherNet/IP™ server

### USB

- USB 2.0 device
- Mini USB connector type
- Recognized as a composite device: vendor specific and mass storage classes
- USB host (future option)

### Real Time Clock with Battery Backup

- Accuracy (typical): +/- 30 PPM at 77°F (25°C)
- +30/-100 PPM overtemperature operating range
- Battery type and typical lifetime rating: 10 years at 77°F (25°C)
- Lithium battery used, recycle properly

### Data Logging

- Maximum of 2000 valid records
- Maximum of 500 unique data points per bus and zone
- File storage on embedded micro SD memory
- Comma separated value (CSV) file type
- Access log files via USB device port

### Memory Card

- Micro SDHC (4-32GB)
- 4GB class 4 SDHC on standard models (operating temperature: -25 to 85°C)
- 16GB class 10 SDHC on data log models (operating temperature: -40 to 85°C)
- -4 to 185°F (-20 to 85°C) ambient rating, non-volatile memory

**Note:** All module parameters are backed up in memory.

## Configuration Code

Module for communications, data logging and storage. Comes standard with Modbus® TCP, standard bus over Ethernet, USB device, internal storage and SD card.

① ② ③ ④ Rail Mount Access Module <b>RMAP</b>	⑤ Additional Communication Protocols	⑥ Optional Communication Protocols	⑦ Data Logging	⑧ Wireless Connectivity	⑨ Future Option <b>A</b>	⑩ Future Option <b>A</b>	⑪ ⑫ Additional Options
--	---	---------------------------------------	-------------------	----------------------------	--------------------------------	--------------------------------	---------------------------

⑤	Slot B Options
A =	None
2 =	Modbus® RTU 232/485
5 =	DeviceNet™ (future option)

⑥	Optional Communication Protocols
A =	None
3 =	EtherNet/IP™ server

⑦	Data Logging
A =	None
D =	Data logging to 16G SD card

⑧	Wireless Connectivity
A =	None
B =	Bluetooth® (future option)
W =	Wi-Fi (future option)

⑨	Future Option
A =	Future option

⑩	Future Option
A =	Future option

⑪ ⑫	Additional Options
AA =	Standard
XX =	Custom/locked code application specific

Watlow®, EZ-ZONE®, ASPYRE® and POWERGLIDE® are registered trademarks of Watlow Electric Manufacturing Company.

RMA PLUS™ is a trademark of Watlow.

Modbus® is a registered trademark of Schneider Automation Incorporated.

Windows® is a registered trademark of the Microsoft Corporation.

Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.

DeviceNet™ and EtherNet/IP™ are trademarks of Open DeviceNet Vendors Association.

Powered by Possibility

To be automatically connected to the nearest North American Technical Sales Office:

1-800-WATLOW2 • [www.watlow.com](http://www.watlow.com)  
[inquiry@watlow.com](mailto:inquiry@watlow.com)

International Technical Sales Offices:

Austria	+43 6244 20129 0	India	+91 40 6661 2700
China	+86 21 3532 8532	Italy	+39 02 458 8841
France	+33 1 41 32 79 70	Japan	+81 3 3518 6630
Germany	+49 7253 9400 0	Korea	+82 2 2169 2600

Mexico	+52 442 256 2200
Singapore	+65 6773 9488
Spain	+34 91 675 1292
Taiwan	+886 7 288 5168
UK	+44 115 964 0777