

# RMA PLUS™ Remote Access Module

Watlow's New RMA PLUS<sup>™</sup> Remote Access Module Offers Plug and Play Access to Powerful EZ-ZONE® RM Family



Watlow's new RMA PLUS<sup>™</sup> remote access module supports Watlow's powerful EZ-ZONE<sup>®</sup> 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<sup>®</sup> TCP and Modbus<sup>®</sup> 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<sup>®</sup>.

#### **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

- 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+ (high-speed Watbus)
- EZ-ZONE RM (A, C, E, H, L, S) (low-speed Watbus)
- EZ-ZONE PM, RUI, ST (low-speed Watbus)
- EZ-ZONE RM (F, G, UH, Z)
- POWERGLIDE<sup>®</sup>

#### 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 (Watbus) for configuration and communication connection to all **EZ-ZONE** products

#### **Standard Communication**

- Watbus over Ethernet (gateway to high-speed Watbus)
- Watbus over USB (gateway to high-speed Watbus)
- Watbus via serial ('C' connector)
- Modbus<sup>®</sup> 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
- DeviceNet<sup>™</sup>

#### EtherNet/IP<sup>™</sup> server

#### **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.

USB

USB 2.0 device

storage classes

77°F (25°C)

Data Logging

and zone

Memory Card

memorv

Micro SDHC (4-32GB)

temperature: -25 to 85°C)

temperature: -40 to 85°C)

•

•

Mini USB connector type

• USB host (future option)

**Real Time Clock with Battery Backup** 

• Lithium battery used, recycle properly

Maximum of 2000 valid records

Accuracy (typical): +/-30 PPM at 77°F (25°C)

 +30/-100 PPM overtemperature operating range • Battery type and typical lifetime rating: 10 years at

Maximum of 500 unique data points per Watbus bus

File storage on embedded micro SD memory

4GB class 4 SDHC on standard models (operating

• 16GB class 10 SDHC on data log models (operating

-4 to 185°F (-20 to 85°C) ambient rating, non-volatile

Note: All module parameters are backed up in memory.

Comma separated value (CSV) file type

Access log files via USB device port

· Recognized as a composite device: Vendor specific and mass

|   | 3 <b>3</b>                       |  | 5  | 6  | 7               | 8                        |   | 9  | 10                    | 11 12                 |               |  |  |
|---|----------------------------------|--|--|--|-----------------|--------------------------|---|--|-----------------------|-----------------------|---------------|--|--|
| Rail<br>Access  | Mount<br>Module                  | _  | Additional<br>Communication<br>Protocols | Ultra High Density<br>Thermocouple<br>Input Card | Data<br>Logging | Wireless<br>Connectivity | _   | Future<br>Option<br>A  | Future<br>Option<br>A | Additional<br>Options |               |  |  |
| 5   |                                  |  |  |  |                 |                          | Future Option   |  |                       |                       |               |  |  |
|   | A = None                         |  |  |  |                 |                          | A = Future option   |  |                       |                       |               |  |  |
| 2 = Modbus <sup>®</sup> RTU 232/485<br>5 = DeviceNet <sup>™</sup> (future option) |                                  |  |  |  |                 | 10 Future Option         |   |  |                       |                       |               |  |  |
|   |                                  |  |  |  |                 |                          |   |  |                       |                       |               |  |  |
| 6   | Optional Communication Protocols |  |  |  |                 | 11 12                    | 11 12 Additional Options  |  |                       |                       |               |  |  |
| A = None  |                                  |  |  |  |                 | AA = Standard            |   |  |                       |                       |               |  |  |
| 3 = EtherNet/IP server (future option)  |                                  |  |  |  |                 | XX = C                   | XX = Custom/locked code application specific  |  |                       |                       |               |  |  |
| -   | ⑦ Data Logging                   |  |  |  |                 |                          |   |  |                       |                       |               |  |  |
|   | A = None                         |  |  |  |                 |                          |   |  |                       |                       |               |  |  |
| -   | D = Data logging to 16G SD card  |  |  |  |                 |                          |   |  |                       |                       |               |  |  |
|   | 8 Wireless Connectivity          |  |  |  |                 |                          | Watlow®, EZ-ZONE® and POWERGLIDE® are registered trademarks of Watlow Electric Manufac- |  |                       |                       |               |  |  |
| <u>A =</u>  | None                             | turing Company.<br>RMA PLUS™ is a trademark of Watlow. |  |  |                 |                          |   |  |                       |                       |               |  |  |
| B =   |                                  |  |  |  |                 |                          |   |  |                       | ider Automation       | Incorporated. |  |  |
|   |                                  |  |  |  |                 |                          |   | Windows® is a registered trademark of the Microsoft Corporation. |                       |                       |               |  |  |

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