

Connectivity for a New Generation of Controllers: A Deeper Look at RMA PLUS Remote Access Module

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In today's industrial applications, connectivity is crucial. From precise control of fault-intolerant processes to real-time data gathering for "Industry 4.0" signaling and intelligence, the ability to connect devices quickly and easily can swiftly become an asset, or a challenge.

The desire for easier connectivity is part of what drives the design of new controllers, such as [Watlow's new RMA PLUS](/en/products/controllers/ez-zone-rm-modules/rma-plus-remote-access-modules) (</en/products/controllers/ez-zone-rm-modules/rma-plus-remote-access-modules>). The RMA PLUS is an enhanced version of the more traditional [EZ-ZONE RM remote access module](/en/products/controllers/ez-zone-rm-modules/ez-zone-rm-access-module) (</en/products/controllers/ez-zone-rm-modules/ez-zone-rm-access-module>), designed specifically to offer standard state-of-the-art connectivity, from the device to the entire system, without the need for special converters.

The incorporation of newer technologies into the RMA PLUS has been slow but purposeful to ensure both enhanced functionality and full backwards compatibility, and it has been well worth the wait. Here are some of the new design features, offered to help spark discussion about what is now possible in industrial applications:

Modern Connectivity

The new RMA PLUS has a standard USB connection built in, and so no longer requires a separate converter to connect to a PC or network. It also includes a built-in managed ethernet switch and two ethernet jacks, eliminating the need for an additional external switch (especially for smaller systems). These improvements allow for real-time communication with other devices and software packages, critical for monitoring and Industry 4.0 applications. The built-in ethernet switch also offers port mirroring, which makes for easier troubleshooting.

Better Data Logging, Included Standard

Users can now log any data point in the system, up to 16 gigabytes of data (standard). There is also an upgrade to a maximum of 32 gigabytes of data. Data can easily be pushed to a USB stick or to a server via ethernet, where it can then be routed to an IT or QA team via email automation. Discovery and transfer speeds have gone from minutes to seconds.

This kind of real-time data logging can help monitor temperatures—up to a couple of hundred data points—ensuring consistency across multiple zones. Any zones that become critical can then set off an appropriate warning indication.

Records can also be stored that tie data on things like temperature, uptime, and yield to specific points in time. That data can be collected for further processing and analysis in Industry 4.0 applications (“Big Data”), ultimately helping with discovery and troubleshooting exercises. Configuration and data logs are available as Windows® files so they can be easily accessed and used.

Optional Headless Control

Some industrial applications require that controllers be installed in hard-to-reach places. With older models of controllers, the need for a direct cable connection to download data or install updates made this a challenge.

The new RMA PLUS also had a headless (no display) option that can be mounted on rails placed in areas where it is difficult or unsafe for people to go. The device can then communicate with a network through IoT software, using a remote device for display and data download purposes.

Still Backwards Compatible

The RMA PLUS was designed to be a seamless replacement for EZ-ZONE controllers; just plug it in and, with a little configuration, it's ready to go. The device is backwards compatible with other software applications and modules you may already be using.

Ready to Upgrade?

Watlow is proud of the improvements reflected in the new RMA PLUS, especially those having to do with connectivity and logging. Customers who have been waiting for these more modern features are encouraged to check out [product specs and purchase information. \(/en/products/controllers/ez-zone-rm-modules/rma-plus-remote-access-modules\)](/en/products/controllers/ez-zone-rm-modules/rma-plus-remote-access-modules)