

Remote RMX-4000

General Description

The Remote RMX-4000 is Westell's next-generation site management platform that builds on and extends the IoT capabilities of Westell's Intelligent Site Management solutions for monitoring.

The Remote RMX-4000 enables site alarm monitoring, intelligent protocol conversion, wireless device aggregation, and equipment connectivity, acting as a smart extension of your Operations Support Systems (OSS). It is designed to enhance your network management strategy, reduce operational costs, and improve operational efficiency with reduced truck rolls.

The RMX-4000, a highly integrated site management solution, includes four serial, 14 Ethernet, and 34 I/O ports and 2 SFP slots, as well as extensibility via Westell's SiteBus™ sensor network and RMB and RME expansion units. It provides PoE power for up to four 802.3af-compliant PoE powered devices, such as Westell's RMB series of alarm collectors, IP cameras, or other devices.

In total, the RMX-4000 can support up to 12 RME/RMB expansion modules, providing port capacity for any situation. The RMX-4000 also supports options for WiFi, 900Mhz sensor connectivity, and wireless configuration via mobile applications. These new device aggregation capabilities support new applications and simplified installation processes previously unattainable with traditional site management systems.

As with all products in the Westell Remote product line, the RMX-4000 performs protocol mediation and interface conversion, collects alarms and performance data, and supports bi-directional management control with Westell's Optima Management System®

RMX-4000 supported protocols

DHCP (server, client, relay) / DNS / NTPv4
HTTPS / SFTP / SSHv2 / Telnet
Internet Protocol version 4 (IPv4) and version 6 (IPv6) / NAT64
IPSec / OpenVPN
Serial protocols RS232, RS485 / TBOS
SNMP (v1, v2c, v3) / TL1 / Web API
Spanning Tree (IEEE 802.1d)
TACACS+ AAA / RADIUS



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via Ethernet, Fiber, or wireless communication options. Together, the Remote RMX-4000 and Optima provide detailed monitoring, remote control, and management for virtually all remote site devices.

The Remote RMX-4000 provides IP network connectivity for site management and alarm monitoring.

Product Highlights

- Capacity flexibility and scalability for any size site
- Integrated fiber WAN and 4G LTE connectivity options
- 4 PoE ports for extensive expansion, site security, and other applications
- SiteBus for low-cost sensor support and relay output expansion
- Next-generation connectivity options for wireless sensors and systems
- Easy-to-use GUI with Optima
- Advanced equipment management and protocol conversion
- Custom application extension support
- Flexible IP network connectivity including wireless networking options

Wi-Fi (2.4Ghz, 802.11b/g/n with WPA2/PSK [AES] security)
BLE (Mobile device must support BLE Low Energy 4.1 or higher)

RMX-4000 management and management access

Command Line Interface (CLI)
Web-based user interface administration
Console port local access
Wizard configuration support
Optima Management System Support

Remote RMX-4000



Ordering information

RMX-4000	RMX-4000 system + WiFi
RMX-4000-C001	RMX-4000 with dual relay module and indoor/outdoor temperature sensor
RMX-4048	RMX-4000 system + WiFi + global 4G LTE
RMX-4100	RMX-4000 system + WiFi + 900Mhz sensor support (USA)
RMX-4148	RMX-4100 + global 4G LTE
RMX-4200	RMX-4000 system without WiFi or BLE
RMX-4200S	RMX-4200 system with enhanced serial capacity
RMX-4200-C001	RMX-4200 with dual relay module and indoor/outdoor temperature sensor
RMX-4248	RMX-4200 + global 4G LTE
RMX-4248S	RMX-4248 system with enhanced serial capacity
RMX-4300	RMX-4000 without Wifi or BLE, + 900 MHz sensor support (USA)
RMX-4300S	RMX-4300 system with enhanced serial capacity
RMX-4300-C001	RMX-4300 with dual relay module and indoor/outdoor temperature sensor
RMX-4348	RMX-4300 + global 4G LTE
RMX-4348S	RMX-4348 with enhanced serial capacity

RMX-4000 physical specifications

Depth (Rev A):	10 in (25.4 cm)
Depth (Rev B):	9.5 in. (24.13 cm) <i>(Units produced after September 2021)</i>
Height:	1.75 in. (4.45 cm)
Width:	17 in. (43.18 cm)
Weight:	5.65 lbs
Rack mounting:	19 or 23 in. racks, (1RU)
Power requirements:	Dual input (A/B feed): 19W maximum (not delivering PoE) 85W max with full PoE budget Input voltage range: +/- 20 to 60 VDC Voltage applications: +24VDC and -48VDC
Analog power outputs	100 mA @ 24VDC (200 mA @ 12VDC) maximum cumulative current for both 12/24 VDC outputs 50 mA @ 5VDC maximum cumulative current for both 5VDC outputs

Environmental / Reliability / Maintenance / Compliance

Extended temperature range of -40°C to 65°C (-40°F to 149°F)
Humidity - 0% to 95% (non-condensing)
MTBF - 200,000 hours @ 25°C
MTTR - 30 minutes
CE Mark, EN 60950, FCC, PTCRB

Remote suite of products overview

Product	SFP 10/100/1000	Ethernet Ports	Async Ports	Discrete Ports ^A	Control Outputs ^B	Analog Inputs ^{C, D}		1-wire SiteBus	WiFi	Wireless Sensors	Input Power
						0-10 VDC	4-20 mA				
RMX-4000	2	2 10/100/1000 12 10/100 (4 PoE) ^E	4 ^F	32	0	2	2	2	Yes	--	+/- 20-60 VDC
RMX-4100	2	2 10/100/1000 12 10/100 (4 PoE) ^E	4 ^F	32	0	2	2	2	Yes	Yes	+/- 20-60 VDC
RMX-4200	2	2 10/100/1000 12 10/100 (4 PoE) ^E	4 ^F	32	0	2	2	2	--	--	+/- 20-60 VDC
RMX-4200S	2	2 10/100/1000 12 10/100 (4 PoE) ^E	8 ^F	16	0	2	2	2	--	--	+/- 20-60 VDC
RMX-4300	2	2 10/100/1000 12 10/100 (4 PoE) ^E	4 ^F	32	0	2	2	2	--	Yes	+/- 20-60 VDC
RMX-4300S	2	2 10/100/1000 12 10/100 (4 PoE) ^E	8 ^F	16	0	2	2	2	--	Yes	+/- 20-60 VDC
RMX-3800	1	1 10/100/1000 9 10/100 (1 PoE) ^G	4 ^H	16	0	2	2	2	--	--	+/- 20-60 VDC
RMX-3600	1	1 10/100/1000 8 10/100	4 ^H	16	0	2	2	2	--	--	+/- 20-60 VDC
RMC-760	--	2 10/100	2 ^F	12	1	1	1	1	--	--	+/- 20-60 VDC
DMX-1600	--	1 10/100/1000 2 10/100 (1 PoE) ^I	3 ^F	8	0	0	0	1	--	--	+/- 20-60 VDC or PoE

A. Additional discrete ports can be added with use of SBInput8 input modules. B. Control outputs can be added with the use of SBRelay2 relay modules. C. All analog inputs are configurable for voltage or current. D. Additional analog inputs can be added with the use of SBAnalog4 input modules. E. Can power up to four 802.3af-compliant devices or up to two 802.3at-compliant (PoE+) devices. Grouped PoE ports 13/15 and 14/16 support maximum PoE budget of 30W each. See RMX-4000 Installation Guide for details. F. All async ports operate in RS232 or RS485 mode. G. Can power one 802.3af (PoE) or 802.3at-compliant (PoE+) device. H. 2 async ports operate in RS232 and 2 ports operate in RS232 or RS485 mode. I. Ethernet port 2 accepts PoE input. Ethernet port 3 provides 802.3at-compliant PoE+ output when powered by +/- 20-60 VDC.

