DM Series

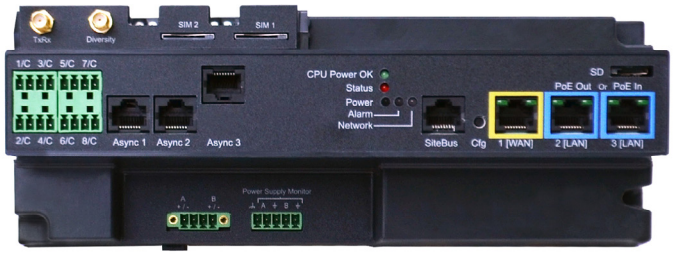
General Description

Westell's DM Series of DIN-rail mountable modular devices provides low-power, low-cost options to expand existing Remote peripheral capacity or outfit new installations.

Model DME-1 provides peripheral I/O capacity via a base platform featuring two Ethernet ports (one providing PoE input, the other providing PoE output), two RS232/RS485 serial ports with RJ-45 pinouts matching Remote RMC and Remote RMM models, eight onboard dry contact inputs, one SiteBus port, dual 24 VDC power inputs, and LEDs for power, alarm, and PoE status.

Model DMX-1600 adds the IoT capabilities of Westell's intelligent Site Management solutions for monitoring to the DME-1 platform with a CPU module with high-performance core. The DMX-1600 also adds a switched GigE 10/100/1000 WAN Ethernet port and a third software-selectable RS232/RS485 serial port. Model DMX-1648 adds 4G LTE via a field-swappable modular modem. DMX-1600 models suitably replace existing Remote devices or anchor new Intelligent Site Management installations.

Model DMX-1600 supports access to its user-friendly web GUI via BLE interface for concurrent smartphone internet access. Westell's OnRamp app for iOS and Android phones provides field technicians an easy-to-use tool to perform initial configuration with a smartphone at the installation site.



DMX-1648

Product Highlights

- 2 Ethernet ports, one with PoE input and the other with PoE output for extensive expansion, site security, and other applications
- DMX-1600 models have an additional 10/100/1000 Ethernet port
- SiteBus for low-cost sensor support and relay output expansion
- Two (DME-1) or three (DMX-1600) software-selectable RS232/RS485 serial ports with RJ-45 pinouts matching Westell Remote RMM- and RMC- models for easy replacement installations
- Eight pre-wetted dry contacts on pluggable connectors
- SiteBus port for temperature and humidity sensors and relays
- Compact DIN-rail-mountable design suitable for most deployment environments
- Integrated 4G LTE connectivity options
- Redundant dual 20-60 VDC power inputs with DC Voltage monitoring and alarm inputs for AC failure signals from rectifier
- BLE interface for on-site configuration with Westell OnRamp mobile phone app

DMX-1600 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)
BLE (Mobile device must support BLE Low Energy 4.1 or higher)

DM Series management and management access

Web-based user interface administration
Local access to Web GUI via BLE interface and OnRamp mobile phone app

DM Series

Ordering information

DME-1	Base DME-1 peripheral unit
DMX-1600	Base DMX remote unit
DMX-1648	DMX remote unit LTE 4G version

DME-1 supported protocols

HTTPS
Serial protocols RS232, RS485

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 62368, FCC

DM Series physical specifications

Height:	3.75 in (9.52 cm)		
Depth:	DMX-1648 -- 3.2 in. (8.13 cm) All other DM Series models -- 2.91 in. (7.39 cm)		
Width:	10 in. (25.4 cm)		
Weight:	DME-1 -- 1.05 lbs DMX-1600 w/o wireless -- 1.2 lbs. DMX-1648 with wireless -- 1.3 lbs.		
Mounting:	DIN rail		
Power requirements:		*With LTE*	*Without LTE*
	Input excluding PoE output	12W	6.5W
	Input including full budget for PoE output	12W + 35W	6.5W + 35W
	Input voltage range: +/- 20 to 60 VDC		
Power over Ethernet	Ethernet port 1 provides PoE input Ethernet port 2 provides PoE output *(inactive when the device is powered by PoE only)*		

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.

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