



RMB-3 Compact Alarm Expansion Unit

General Description

The Westell RMB-3 is a compact alarm expansion unit compatible with the Remote suite of products, specifically designed for outside plant and C-RAN cabinet locations or other alarm applications where space is at a premium. The unit connects to a host Remote using standard Ethernet, and a second Ethernet connection accommodates “daisy-chaining” with other RMB-3s and network devices for greater I/O capacity. As with other members of the RMB alarm module family, the RMB-3 is completely managed by the host Remote unit, and requires no separate configuration or addressing.

The RMB-3 includes a total of twenty-four (24) dry-contact inputs, one (1) analog voltage input, one (1) analog current input, two (2) control relay outputs, and a SiteBus port supporting digital temperature and humidity sensors. 24VDC and 5VDC outputs are also provided to make powering external sensors easy.

Up to four (4) optional plug-in modules add inter-building lightning surge protection to four (4) dry-contact inputs each, providing as many as sixteen (16) protected inputs. This unique arrangement eliminates the cost and complexity of external gas discharge tube (GDT) blocks, punch-downs, and associated wiring, saving installation time and space in crowded outdoor cabinets. Surge protection modules can be retrofitted to new or existing units, and standard off-the-shelf GDT protection blocks are easily replaced in the field. Removable screw terminals are used on all alarm input/output connections, allowing for rapid replacement and testing procedures.

All those features are packed within an extremely compact unit occupying 1 RU in a 19- or 23-inch rack.



RMB-3 pictured without mounting brackets

RMB-3 Highlights

- Compact design occupies just one RU in 19- or 23-inch rack
- 24 dry-contact inputs
- 2 analog inputs
- 2 relay outputs
- SiteBus port supports digital temperature and humidity sensors
- Managed entirely by Remote via Ethernet connection
- Optional plug-in surge protectors can safeguard up to 16 alarm contacts from lightning strikes
- Wide +/- 20-60VDC input voltage, with 24VDC and 5VDC outputs to power external sensors



RMB-3 with rack mounting ears and all four surge protection modules installed





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Ordering information

RMB-3	RMB-3 rack mounted alarm collector, base unit
RMB-3PM	4 input Protection Module for RMB-3
RMB-3GB	Protection grounding bar, required for RMB-3PM
RMB-3P4	RMB-3 with one protection module (4 inputs protected)
RMB-3P8	RMB-3 with two protection modules (8 inputs protected)
RMB-3P12	RMB-3 with three protection modules (12 inputs protected)
RMB-3P16	RMB-3 with four protection modules (16 inputs protected)
06-535-005	Optional cable management bar for 19" racks

RMB-3 Features

Compact design fits 1 RU
24 dry contact inputs
1 analog voltage input
1 analog current input
2 control relay outputs
1 SiteBus port
24VDC and 5VDC outputs for external sensors
1-4 optional field-replaceable plug-in lightning surge protection modules to protect up to 4 dry-contact inputs each
Removable screw terminal connections for all alarm inputs/outputs

Environmental

Extended temperature range:	-40°C to +65°C (-40°F to 149°F)
Humidity:	0% to 95% (non-condensing)

Compliance

CE Mark / EN 60950 / FCC / GR-3108 / NEBS Level III	
Remote RMB-3 physical specifications	
Depth:	3.9 in. (9.75 cm)
Depth with Protection Modules:	5 in. (12.7 cm)
Height:	1.67 in. (4.175 cm)
Width:	16.952 in. (42.38 cm)
Weight:	2.3 lbs. (1.04 kg)
Weight with 4 modules:	3.3 lbs. (1.5 kg)
Mounting:	19 or 23 inch rack options
Power requirements:	+/- 20-60 VDC ~.35A @ 24V; ~.175A @ 48V 8.3W max while providing 100ma @ 24VDC and 50ma @ 5VDC
MTTR:	5 minutes



RMB-3 with two surge protection modules, above, and an uninstalled surge protection module, below.



Remote suite of products overview

	Model No.	Async Ports	Ethernet Ports	Discrete Ports	Control Outputs	0-10 VDC Inputs	4-20 mA Inputs	Input Power
Host Remote Products	Remote RMX-3200	8	8 (2 PoE)	64	4	Up to 12 ^A	Up to 12 ^A	+/- 20-60 VDC
	Remote RMM-1400	4	4 (2 PoE)	Yes ^B	Yes ^B	Yes ^B	Yes ^B	+/- 20-60 VDC
	Remote RMM-800	2	2	16	1	1 ^C	1 ^C	+/- 20-60 VDC
	Remote RMC-700	2	2	12	1	1 ^C	1 ^C	+/- 20-60 VDC
Alarm Expansion Units	Remote RMB-1B ^D	--	1 ^E	64	4	4	4	PoE Class 4
	Remote RMB-2 ^D	--	1 ^E	64 ^F	4	4	4	PoE Class 4
	Remote RMB-3 ^P	--	2	24	2	1	1	+/- 20-60 VDC

^ARMX-3200 inputs configurable for current or voltage ^B Requires the use of an RMB-1B, RMB-2, or RMB-3 ^C One 0-10 VDC input or one 4-20 mA input ^D Requires a Host Remote RMX-3200, RMM-1400, RMM-800 or RMC-700 ^E Connection to host Remote ^F Supports wet or dry contact inputs and input voltages of 4-72 VDC with positive or negative grounding

