

16-CHANNEL RECTIFIER RMU EXPANSION MODULE

More assets. Deeper Insights.
Simplified Compliance.

Expand Your Reach, Not Your Footprint. Elevate your cathodic protection monitoring with the Bullhorn 16-Channel Expansion Module. Designed to integrate seamlessly with your existing Bullhorn RM510 rectifier remote monitors, this module transforms your standard remote monitor into a high-density data hub.

THE EXPANDED MONITORING SOLUTION

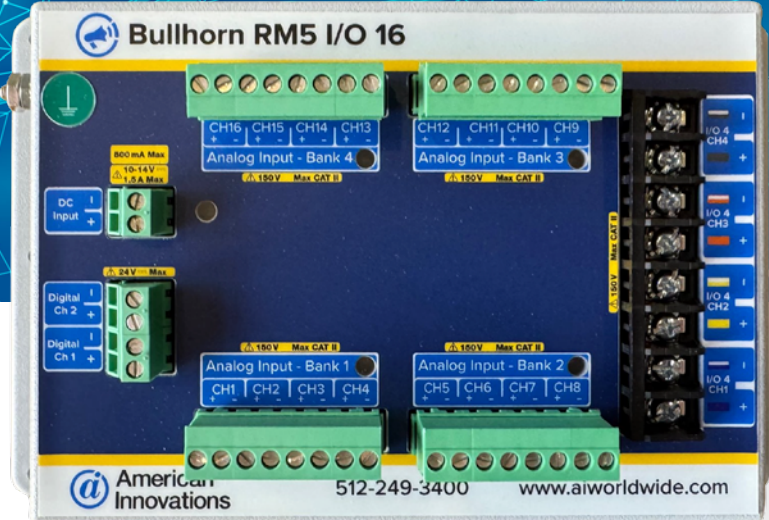
Engineered to solve complex survey site challenges without the need for multiple remote monitoring units—the 16-Channel Expansion Module expands your existing Bullhorn RM510 rectifier unit from 4 channels to 16 differential analog channels. Monitor multiple assets, additional negatives, and complex junction boxes from a single, compact device.

COMPREHENSIVE DATA FOR COMPLEX SITES

Designed for high-density applications like tank farms and multi-lead junction boxes, the Expansion Module ensures you capture every critical data point. It eliminates manual bi-monthly checks on additional assets, streamlines your compliance workflow and reduces site visits. It fits inside a standard rectifier cabinet or NEMA enclosure, delivering massive capability in a discrete package.

SEAMLESS FIELD INTEGRATION

This module is built for easy deployment. It utilizes your RM510 for power. Simply upgrade the RM510 firmware using the Bullhorn FieldPro mobile application and wire the I/O expansion module to your RM510 analog input module.



16-CHANNEL EXPANSION MODULE HIGHLIGHTS

- ✓ 16 differential analog channels for high-density monitoring
- ✓ DC voltage range of +/- 150Vdc
- ✓ Surge immunity up to 30kV (300ms transients)
- ✓ Channel-to-channel isolation of 250V (DC or AC)
- ✓ Compact form factor fits inside NEMA 4 enclosures or rectifier cabinets
- ✓ Seamless integration with existing Bullhorn RM510 units
- ✓ Powered directly by the RM510 host unit
- ✓ Backed by American Innovations' standard 3-year warranty

BULLHORN RM510 16-CHANNEL EXPANSION MODULE SPECIFICATIONS

MECHANICAL

Dimensions	Length	7.87" (200mm)
	Width	4.93" (125.2mm)
	Thickness	1.10" (28mm)
Weight	14.2 oz. (0.40 kg)	
Mounting	Must be mounted inside a weatherproof enclosure (e.g. NEMA4)	

ENVIRONMENTAL

Maximum Altitude	9,843 ft. (3,000 m.)
Temperature Range (Ambient)	-22°F to 140°F (-30°C to +60°C)
Maximum Relative Humidity	0- 95% RH Non-condensing

POWER

Input	10-14V DC
Voltage Source	RM510 Power Supply

EXTERNAL CONNECTIONS

IO Expansion Connectors (4)	8 Position Terminal Block, 5.08mm Pitch, Pluggable
Power in	2 Position Terminal Block, 5.08mm Pitch, 45 Degree
Digital Outputs	4 Position Terminal Block, 5.08mm Pitch, 45 Degree
Analog Connection to RM510 I/O module analog inputs	8 Position Terminal Strip, 0.375" spacing

ANALOG INPUT SPECIFICATION

Number of Channels	16 Differential
DC Voltage Range	+/-150Vdc
AC Voltage Range	100V AC RMS
Input Impedance	20 Meg ohms
Accuracy	+/- 2% of range.
Surge	Survives multiple 30kV impulses, (300mSec transients)
Channel to Channel Isolation	250 V (DC or AC)

FREQUENTLY ASKED QUESTIONS (FAQs)

Are my existing RM510 rectifier RMUs compatible?

Yes. Your investment is future-proof. Existing RM510s work with this module via a simple firmware update, upgrading your current equipment to 16-channel capability.

Does this require a separate power supply?

No. The RM510 rectifier monitor power supply also powers the I/O expansion module.

How does the module connect?

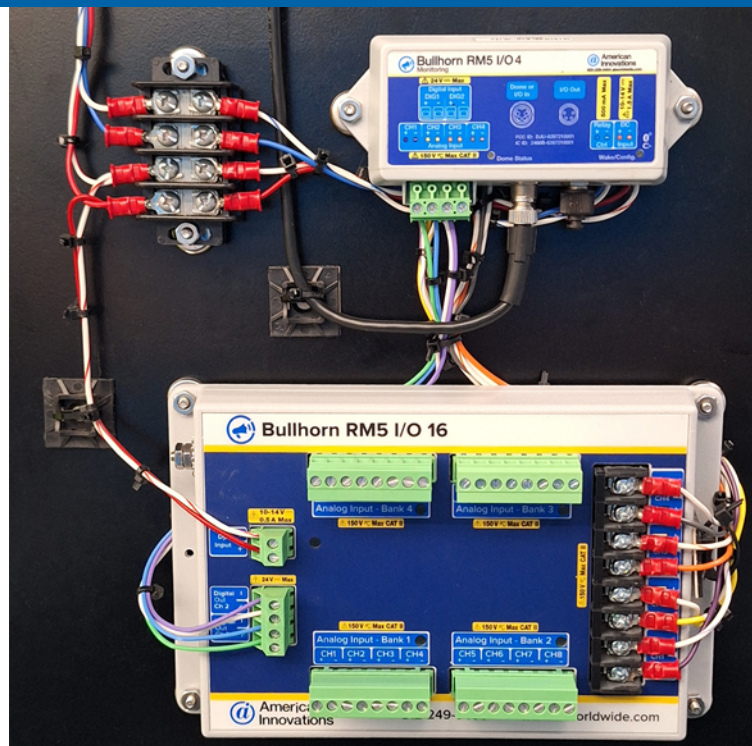
Using the included installation guide, the Expansion Module is wired directly to the RM510 I/O module and the RM510 power supply.

Can I use multiple modules on one unit?

Currently, the system supports one expansion module per RM510, providing a total of 16 analog channels.

What is the warranty?

The module is covered by the standard Bullhorn 3-year warranty.



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