

# ModBus and Rack Interface Specifications

The ModBus and Rack Interface Module is designed for high reliability for the plant’s most critical rotating machinery. It reads parameters from all AMS 6500 modules and outputs these parameters via ModBus TCP/IP and/or ModBus RTU (serial). This 1-slot monitor is used together with other AMS 6500 monitors to build a complete API 670 machinery protection monitor. Applications include steam, gas, compressors and hydro turbo machinery.

Operators are provided machinery health parameters in the control environment for seamless integration. The module powers local graphical displays at the protection rack for machine and instrumentation readout. Either ModBus TCP/IP or ModBus RTU can be configured, or for redundant paths, can be used simultaneously.

The AMS 6500 is an integral part of PlantWeb® and AMS software. PlantWeb provides operations integrated machinery health combined with the Ovation® and DeltaV™ process control system. AMS software provides maintenance personnel advanced predictive and performance diagnostic tools to confidently and accurately determine machine malfunctions early.



A6824

A6824-R

Data Output	
ModBus RTU (Serial)	19.2 kbaud Data bits: 8 Parity: Even Stop bit: 1
Default Address	IP address: 192.168.255.1 Subnet mask: 255.255.255.0
ModBus Ethernet	RJ 45 socket, 10BaseT
Green LED	Power supply OK
Handle	Easily remove card and provide plate for module and sensor identification
Example Data Types	Speed, vibration (1/2x, 1x, etc.), gap value, alarm state, channel OK, phase

- 3U size, 1-slot plug-in module decreases cabinet space requirements in half from traditional 6U size cards
- API 670 compliant, hot swappable module
- Password protected user configuration
- Self-checking facilities include monitoring hardware, power input, and hardware temperature
- A6824 module can serve multiple 19” racks
- A6824 is a 6TE wide module, no redundant option, for use in the IMR6000 series, 19” rack
- A6824R is a 4TE wide module, redundancy optional, for use in the IMR6500 series, 19” rack

Environmental, General	
Module	IP 00, DIN 40050
Front Plate	IP 21, DIN 40050
Climate	DIN 40040 class KTF
Operating Temperature	0° - 65°C (32° - 149°F)
Storage Temperature	-30° - 85°C (-22° - 185°F)
Relative Humidity	5 - 95%, non-condensing
Vibration	<ul style="list-style-type: none"> <li>■ IEC 68-2, part 6</li> <li>■ 0.15 mm, 10 - 55 Hz</li> <li>■ 19.6 mm/s<sup>2</sup>, 55 - 150 Hz</li> </ul>
Shock	<ul style="list-style-type: none"> <li>■ IEC 68-2, part 29</li> <li>■ 98 m/s<sup>2</sup> peak, 16 ms</li> </ul>
EMC Resistance	EN50081-1 / EN50082-2
Power Consumption	Max. 5 W

### A6824 Dimensions:

PCB/EURO card format according to DIN 41494, 100 x 160mm (3.937 x 6.300in)

Width: 30mm (1.181in) (6 TE)

Height: 128.4mm (5.055in) (3 HE)

Length: 160mm (6.300in)

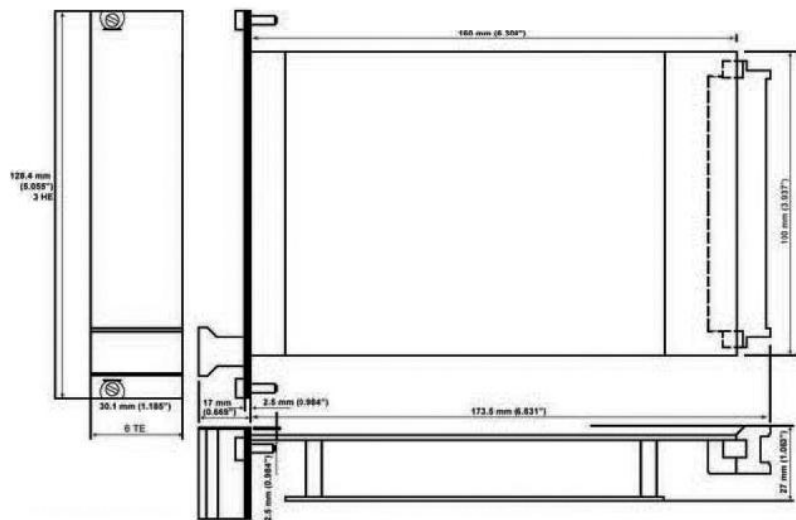
Net Weight: app 320g (0.705lbs)

Gross Weight: app 450g (0.992lbs)  
includes standard packing

Packing Volume: app 2.5dm<sup>3</sup> (0.08ft<sup>3</sup>)

Space Requirements: 1 slot

14 modules fit into each 19" rack



### A6824-R Dimensions:

PCB/EURO card format according to DIN 41494, 100 x 160mm (3.937 x 6.300in)

Width: 19.98mm (0.79in) (4 TE)

Height: 128.4mm (5.055in) (3 HE)

Length: 160mm (6.300in)

Net Weight: app 320g (0.705lbs)

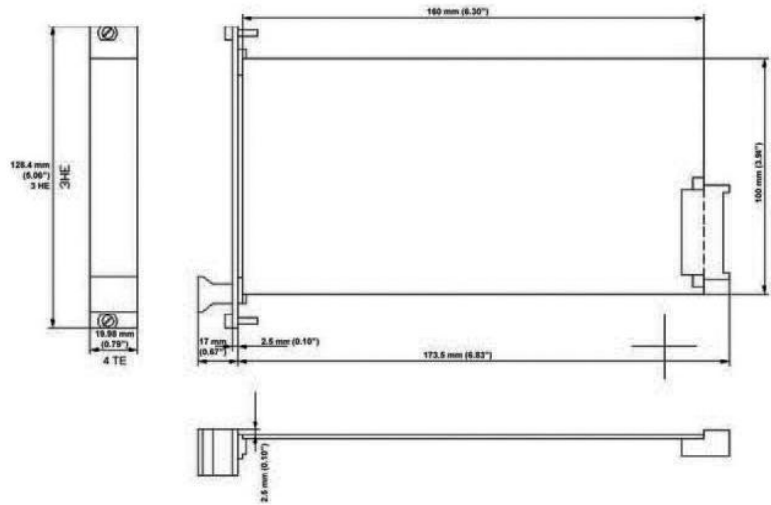
Gross Weight: app 450g (0.992lbs)  
includes standard packing

Packing Volume: app 2.5dm<sup>3</sup> (0.08ft<sup>3</sup>)

Space

Requirements: 1 slot

14 modules fit into each 19" rack



### Ordering Information

Model Number	Product Description
A6824	ModBus and Rack Interface Module for use with IMR 6000/10, IMR 6000/20 and IMR 6000/30
A6824-R	ModBus and Rack Interface Module with redundancy mode for use with AMS 6500 systems