

Emerson - AMS 6500**A6220**

Dual-Channel Shaft Eccentricity Monitor

Verified model data

Manufacturer	Emerson
Part number	A6220
Product family	AMS 6500 Machinery Health Monitor
Product type	Dual-channel shaft eccentricity monitor
Channels	2 independent eddy-current differential inputs
Measurement purpose	Shaft eccentricity and bow below 600 rpm
Supported sensor families	PR6422, PR6423, PR6424 and PR6425
Input range	-1 to 23 VDC
Frequency range	0.017 to 70 Hz
Analog outputs	0/4 to 20 mA and 0 to 10 V
Buffered outputs	Front and rear raw-signal outputs

Selection summary

Emerson A6220 is a dual-channel AMS 6500 monitor for shaft eccentricity and bow during low-speed machine operation.

It accepts supported PR642x eddy-current measuring chains and provides independent channel processing, proportional outputs, buffered signals and protection alarms in one hot-swappable rack slot.

Before replacement or commissioning, preserve probe and converter identities, cold gap, slow-roll reference, channel scale and polarity, alarm logic, relay assignments, bypass state and the saved rack configuration.

APTER POWER

Emerson - AMS 6500**A6220****Additional verified data**

Power consumption	6 W maximum; 250 mA at 24 VDC
Operating temperature	0 to 65°C
Format	3U, one slot, hot-swappable
Dimensions	3.0 × 12.84 × 16.0 cm (W × H × D)
Net weight	Approximately 0.32 kg
Standard	API 670 compliant

Measurement Setup

- Confirm the machine is in the intended slow-roll operating range
- Set each channel from the documented shaft reference and probe polarity
- Retain adequate gap margin for mechanical runout and thermal movement

Probe Chain

- Match the exact PR642x probe and converter for each channel
- Verify bias voltage and raw buffered signal before scaling
- Preserve shielding and grounding from the original installation

Fault Checks

- Compare unstable values with turning-gear speed and target runout
- Inspect bracket rigidity and connector condition before replacing the card
- Verify alarms and relays only after the raw signal is credible

Application checkpoints

- Slow-roll shaft eccentricity monitoring during turbine startup and shutdown
- Shaft-bow verification on compressors and hydro machinery
- Turning-gear condition monitoring in critical turbomachinery protection racks

Evidence boundary: The official card data supports the listed body dimensions and approximate net weight. Probe, converter, rear I/O and rack hardware are separate and are not included in those values.

Source basis: Emerson Protection Cards for AMS 6500 Classic Systems.