

**Emerson - AMS 6500****A6120**

## Dual-Channel Case Seismic Vibration Monitor

**Verified model data**

|                       |                                                                  |
|-----------------------|------------------------------------------------------------------|
| Manufacturer          | Emerson                                                          |
| Part number           | A6120                                                            |
| Product family        | AMS 6500 Machinery Health Monitor                                |
| Product type          | Dual-channel case seismic vibration monitor                      |
| Channels              | 2 independent seismic inputs                                     |
| Supported input types | Electrodynamic velocity sensors and piezoelectric accelerometers |
| Measurement modes     | Vrms, zero-to-peak and peak-to-peak                              |
| Frequency range       | 0.1 Hz to 15 kHz                                                 |
| Format                | 3U, one slot, hot-swappable                                      |
| Power consumption     | 6 W maximum; 250 mA at 24 VDC                                    |
| Operating temperature | 0 to 65°C                                                        |

**Selection summary**

Emerson A6120 monitors absolute case vibration on two independent AMS 6500 channels using compatible velocity sensors or accelerometers.

It processes velocity or acceleration signals into configured vibration values and supplies buffered, proportional and alarm outputs for machinery protection.

Before replacement, preserve each sensor type and sensitivity, channel units and filter, measurement mode, alarm and relay logic, output assignments, bypass state and rack configuration.

APTER POWER

**Emerson - AMS 6500****A6120****Additional verified data**

|              |                                                  |
|--------------|--------------------------------------------------|
| Dimensions   | 3.0 × 12.84 × 16.0 cm (W × H × D)                |
| Net weight   | Approximately 0.32 kg                            |
| Gross weight | Approximately 0.45 kg including standard packing |

**Sensor Match**

- Identify velocity-sensor or accelerometer input on each channel
- Restore the exact sensitivity and power arrangement
- Verify mounting direction and surface preparation

**Signal Setup**

- Select the required RMS, peak or peak-to-peak mode
- Apply the approved frequency band and engineering units
- Check buffered output before trusting calculated vibration

**Protection Test**

- Retain Alert and Danger delays and relay voting
- Verify proportional outputs against a known signal
- Document removal of every maintenance bypass

**Application checkpoints**

- Bearing-housing vibration protection on turbines
- Absolute casing-vibration monitoring on compressors
- Pump and fan condition monitoring using velocity or acceleration sensors

Evidence boundary: Official dimensions and weights apply to the A6120 card itself: net weight approximately 0.32 kg and gross weight approximately 0.45 kg including standard packing.

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