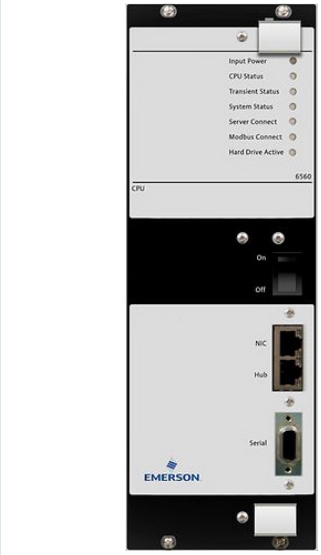
Processor Card Specifications PN A6560, A6560-T

The machinery health processor is the heart of the AMS 6500 Machinery Health Monitor providing field-based, predictive intelligence.

The A6560 provides (1) real-time overall vibration, (2) configurable machinery health monitoring and (3) with the A6560-T, an optional onboard transient processor designed for turbomachinery. The A6560-T includes all of the functionality of the A6560, and also includes the transient option.

While the real-time overall vibration monitor provides a quick check of all rotating machines, the predictive machinery health processor is performing deeper analysis, two channels at a time to help diagnose deteriorating machine conditions. Waveform, spectrum and analysis parameters are computed in the field. Event-based adaptive monitoring also adjusting in the field provides the tailored monitoring for your machines and changing process conditions. Results are sent from the field to the control system or to AMS Machinery Manager software for analysis and storage.



A6560

- A6560 includes a real-time overall vibration processor
- A6560 includes configurable, event based, adaptive machinery health processor
- A6560-T includes same functionality as A6560, and also includes transient monitoring for turbomachinery
- Order tracking
- Optional PeakVue®
- Optional Modbus TCP/Ethernet output
- Local system health check and status LEDs
- Onboard memory stores machinery health data upon network loss
- Each A6560 supports up to two A6510 modules
- Install one A6560 module per chassis when API 670 protection modules are installed
- Install up to two A6560 modules per chassis when API 670 protection modules are not installed
- All versions of the A6560 and A6510 are conformal coated per IPC-A-610E

Technical Data for Process Module

General	
Memory Capacity	32 MB SDRAM, 32 MB Flash
Network Communications	10/100 BaseT Ethernet NIC and HUB, front and rear RJ45 jacks
HUB	May be used for daisy chain-type network architecture
Local Communications	HUB for laptop or local display and RS-232 serial port
Onboard Test Generator	All sensor channels, tachometer channels, AC, DC amplitude and phase
AMS 6500 Rack Health Relay	One relay will change states based loss of power or rack reboot, SPDT 24VDC @ 0.5A DC dry contact
Overall Vibration Monitor	
Sensor Channel Scan Overall Vibration Scan	12 ch rms, DC (or peak-to-peak) per 400 msec Peak-to-peak available withtransient option
DC Scan Rate	Simultaneously scanned with overall vibration scan (includes DC Gap, temperature, and accelerometer bias)
Overall Level and DC Accuracy	1% at input channel range full span at 1kHz
Overall Level and DC Resolution	16 bits
Data Acquisition Event Bases	Relay input, RPM, DC, AC or software controlled

Production State Monitor	
Data Collection	Event based, adaptive
Data Collection Interval	Event based and/or time based
Data Storage Interval	Exception based and/or time based
ADC Resolution	24 bit, 2-channel simultaneous
Dynamic Range	100 dB, all ranges
Spectral Resolution	100 to 6400 lines
Analysis Bandwidth Fmax	10 Hz to 40 kHz, discrete steps
Spectral Scan Rate	1 second per two channels, 400 lines, 400 Hz, 1 avg. (depends on analysis configuration)
Amplitude Accuracy	5% 0.2Hz - 0.5Hz, 2% 0.5Hz - 25kHz, 4% 25kHz - 40kHz
Frequency Accuracy	0.01%, crystal based
THD	-90 dB, all ranges
1x Phase Accuracy	4 degrees 1Hz - 1kHz (not calibrated below 1Hz), 5 degrees > 1kHz
Analysis and Trend Types	Total energy, energy in a range, non-sync energy in a range, sync energy in a range, sync peak, sync phase, true peak, HFD, waveform peak to peak, RPM, gap, orbit, configurable with user defined parameter names
Analysis Setup	Multiple analysis types per machine and per sensor
Averaging	Normal, PeakVue®, order tracking, synchronous time averaging
Units	English, Metric, Hz, CPM, order
Scaling	Linear, log, dB
Windows	Hanning, uniform