A6560R and A6560RT

The A6560R processor is the heart of the AMS 6500 prediction online system. The A6560RT provides the prediction processing for the AMS 6500 Transient system.

A6560R Prediction Processor	
Analog Channels	12 or 24 (1 or 2 A6510)
Tachometer Channels	2 or 4 (0.1-2kHz, or up to 60kHz divided to ≤2kHz, 0.5V to 24V)
Relay Channels	2 or 4 (SPDT 24V @ 0.5A dry contact)
Fmax / Sampling Rate	10 to 40kHz / up to 102.4k sps
Frequency Accuracy	0.01% crystal based, THD -90dB
Phase Accuracy (1X)	4° for 1-1000Hz, 5° > 1000Hz
ADC Resolution/Dynamic Range	24 bit / 95 dB conservatively measured
Amplitude Accuracy	5% 0.2-0.5Hz, 2% 0.5-25Hz, 4% > 25Hz
Lines of Resolution (LOR)	100 up 6400
Channel Scan	2 Channel Simultaneous
Channel Scan Rate Example	1 Second; 2Channel, 400 LOR, 1 Average
Data Collection /Data Storage	Event, Adaptive, Scheduled / Exception and/or Scheduled
Units	English, Metric, SI, Hz CPM, Orders
Scaling	Linear, Log, dB
Windows	Hanning or Uniform
Averaging	Summation (normal),Time Synchronous, Order Tracking
High Frequency Detection	PeakVue®
Hardware Communications	Modbus TCP
Network Communications	10/100 Base T NIC front and rear (same IP address) and Hub (daisy chain)
Local Communications	Hub (Ethernet) or RS232 port on front
Onboard Test Generator	All sensor/tachometer; AC, DC Amplitude and Phase
Rack Health Relay	One for power loss or rack reboot, SPDT 24V DC @ 0.5A DC Dry Contact
Memory	128MB DDR3 SDRAM, 64MB Flash
Overall AC Scan Rate	Simultaneous; 12 or 24 channels; (RMS or Peak-Peak) per 500ms
Overall DC Scan Rate	Simultaneous with sensor scan; DC Gap, temperature and piezo sensor bias
Overall Level and DC resolution	16 bits
Overall Relay Event Input Bases	RPM, DC, AC or SW controlled

A6560R INCLUDES:

- FPGA and real-time signal processor
- Event-based adaptive monitoring
- Order tracking
- PeakVue technology
- Modbus TCP/Ethernet output
- System health and status LEDs
- Onboard memory for untethered monitoring
- Analysis and trends includes; PeakVue measurements, Total Energy, Energy in a Range, Sync Energy in a Range, Sync Peak, Sync Phase, True Peak, HFD, Waveform Peak to Peak, RPM, Gap, Orbit, custom configurable naming
- Multiple analysis setup types per machine and sensor

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A6560RT Transient – Digital Condition Recorder (DCR)	
DCR Analog Channels	12 or 24 (1 or 2 A6510)
DCR Tachometer Channels	2 or 4
DCR Fmax / Sample Rate	2kHz / 5120 samples per second
DCR ADC / Dynamic Range	16 bits / > 80dB
DCR Lines of Resolution	200 up to 51200
DCR Length	100 Hours, all channels / FIFO
DCR Channel Scan	All channels simultaneous
DCR Manual or Auto Archive	Up to 60min. from Alert/ Schedule/Demand
DCR Viewing Modes	Replay with speed control up to 11 CH
DCR Advanced Analysis Tools	Bode, Nyquist, Shaft Centerline, Full Spectrum, Animated Shaft,... plus Modal and ODS output to ME'Scope
A6560R/A6560RT Enviromental	
Operating Temperature	-20˚C to 60˚C (-4˚F to 140˚F) active cool above 49˚C (120˚F)
Relative Humidity	5 to 95% non-condensing
Vibration IEC60068-2-6	5g @ 57 to 500Hz, 3 axes, operating
Shock IEC60068-2-27	30g @ 11ms, 3 axes, operating
Shock IEC60068-2-27	50g @ 8ms, 3 axes, non-operating
Conformal Coated	IPC-A-610E
EU Directive Conformity	RoHS, REACH

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