

CAMAC Equipment

CAMAC, Computer Automated

Measurement And Control, is an

IEEE-standard (583), modular,

high-performance, realtime data

acquisition and control system

concept.

Since 1969, CAMAC has been used in many thousands of scientific, industrial, aerospace, and defense test systems around the world.

APPLICATIONS

Temperature measurement
Pressure measurement
4-20 mA loop-control signal sensing
Potentiometer position sensing
Power supply voltage sensing

3512 16-channel, Scanning A/D Converters



The Model 3512 is a single-width CAMAC module for converting 16 analog voltages into equivalent digital values which can be read via the Dataway.

FEATURES

- Differential inputs
- 16 channels
- Self-scanning
- Internal buffer memory
- 12-bit resolution (1 part in 4096)
- Protected for 300 volt transient



GENERAL DESCRIPTION

The Model 3512 is a single-width CAMAC module for converting 16 analog voltages into equivalent digital values which can be read via the Dataway. The inputs are continuously scanned and converted, and the results stored in the module's 16-word memory. Thus, the CAMAC read cycles are asynchronous with the conversion process, eliminating any overhead due to testing for converter busy. The analog voltages are converted using a sample-and-hold amplifier and a successive-approximation converter.

FEATURE COMPARISON

Item	3512	
Input protection	±35V steady state ±300V for 100 µs	
Operating common-mode voltage	±12V max	
Input voltage ranges	2.5V to 10V unipolar and bipolar	
Input filters	Optional	
Scan rate (16 channels)	16 ms	
Disable scan	No	
Resolution	12 bits	
Input Impedance	10 ⁹ Ω	

FRONT PANEL

The N-light flashes when the module is addressed. The ACTIVE light is on whenever the module is powered and scanning is activated.

MONITORING 4-20 MILLIAMPERE SIGNALS

For monitoring 4-20 milliampere analog signals, it is standard practice to mount a precision 250 ohm resistor external to the module (at the terminal strip) and use the 0 to 5 volt input range. This allows input to the 3512 to be disconnected without disrupting the current loop. The loop must not exceed the maximum operating common-mode voltage rating of the module.

POWER REQUIREMENTS

Model	+6 volts	+ 24 volts	- 24 volts
3512	600 mA	65 mA	30 mA

WEIGHT:

.75 kg. (1 lb. 11 oz.)



ORDERING INFORMATION

MODEL	FILTER	I/O CONNECTOR	MATING CONNECTOR	TERMINATION PANEL (see Note)
3512-A1A	10 Hz/3dB	50-contact Ribbon- socket	5950-Z1A	1850-A1D/1854-A2A
3512-A1B	None	50-contact Ribbon- socket	5950-Z1A	1850-A1D/1854-A2A
3512-E1A	10 Hz/3dB	50-pin "D" Plug	5934-Z1A	1850-E1D
3512-E1B	None	50-pin "D" Plug	5934-Z1A	1850-E1D

Note: The 1854-A2A Rack Termination Panel provides terminations for two 3512 modules on a single panel. Order one 1854-A2A and two each 5853-E30JModule I/O Cables (for 50-contact ribbon connector options only).

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