KineticSystems

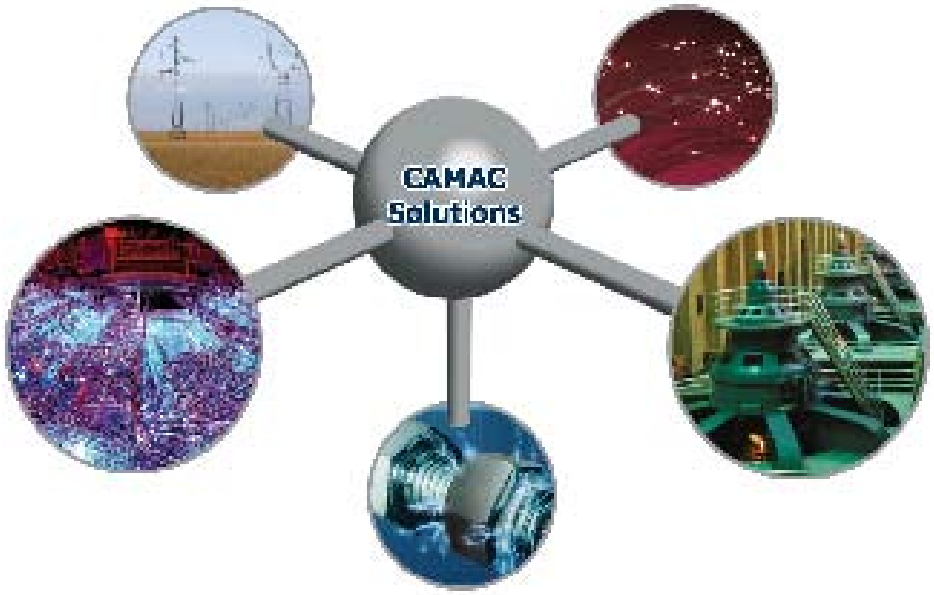
CAMAC Equipment

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.

3473

24-bit Change-of-state Input Register



The Model 3473 is a single-width CAMAC module providing 24 individually isolated contact sense circuits and change-of-state indication.

APPLICATIONS

Contact sense
Event monitoring
Level detectors
Alarms
Manual switch entry
Pressure switches

FEATURES

- 24-bit voltage sense
- Change-of-state indication
- Optical isolation
- 12, 24, and 48 VDC or 120 VAC
- 100 millisecond input filter

GENERAL DESCRIPTION
The Model 3473 is a single-width CAMAC module providing 24 individually isolated contact sense circuits and change-of-state indication. The sense circuit detects the presence or absence of voltage at its terminals and is suitable for sensing such remote process contact closures as limit switches, machine tool relay contacts, pressure switches, manual switches, and mercury-wetted contacts. Four voltage options are available: 12 VDC, 24 VDC, 48 VDC, and 120 VAC.

Input isolation is achieved by using LED/phototransistor optical isolators. Each circuit is a floating two-wire circuit with common-mode voltage isolation greater than 500 volts. Each option has 24 circuits with identical input voltage ratings, and the switching threshold is approximately one half the rated input voltage. Each input circuit draws more than five but less than ten milliamperes. The logic convention is such that a contact closure (input voltage present) is interpreted as a logical "1." Each input is conditioned by filtering after the optical isolator. The filter time constant is 100 milliseconds. Other time constant options are available by special order.

The 3473 contains a 24-bit memory register and a 24-bit comparator. If one or more of the inputs has changed state (1-to-0 or 0-to-1) since the last time the memory register was updated, a common LAM status is set. This can produce a LAM request directing the computer program to read the current state of the inputs.

OPERATION
The 3473 can be used interchangeably with the Model 3471 24-bit Isolated Input Gage if only the F(0)•A(0) Read is used and the LAM request is maintained in a disabled state.

In the initialized state, the input register and the memory register contain the same data pattern. If any input changes state, a not-compare exits and the LAM status is set. This produces a LAM request (if enabled). In response to the LAM request, the program does an F(2)•A(0) command. This reads the new state of the inputs, then updates the memory register to equal the input states, and clears the LAM status.

To determine input state before the recent changes, an F(0)•A(1) command can be performed, reading the state of the memory register. This must be done before the F(2)•A(0) Read.

Note that the first change-of-state sets the LAM status, and no further indication is given (as other inputs change state) until an F(2)•A(0) read-and-clear command is performed. The data staticize latch is disabled during the F(0)•A(0) and F(2)•A(0) commands to prevent ambiguous results if inputs are changing at that time.

POWER REQUIREMENTS
+6 volts — 450 mA

WEIGHT:
.62 kg. (1 lb. 6 oz.)

ACCESSORIES

Model 5950-Z1A	Mating Connector
Model 1850-A1D	Rack Termination Panel

ORDERING INFORMATION

MODEL	DESCRIPTION
3473-A1A	24-bit Change-of-state Input Register —120 VAC
3473-A1B	24-bit Change-of-state Input Register — 48 VDC
3473-A1C	24-bit Change-of-state Input Register — 24 VDC
3473-A1D	24-bit Change-of-state Input Register — 12 VDC
3473-A1E	24-bit Change-of-state Input Register —Contact Input

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