

## CAMAC Equipment

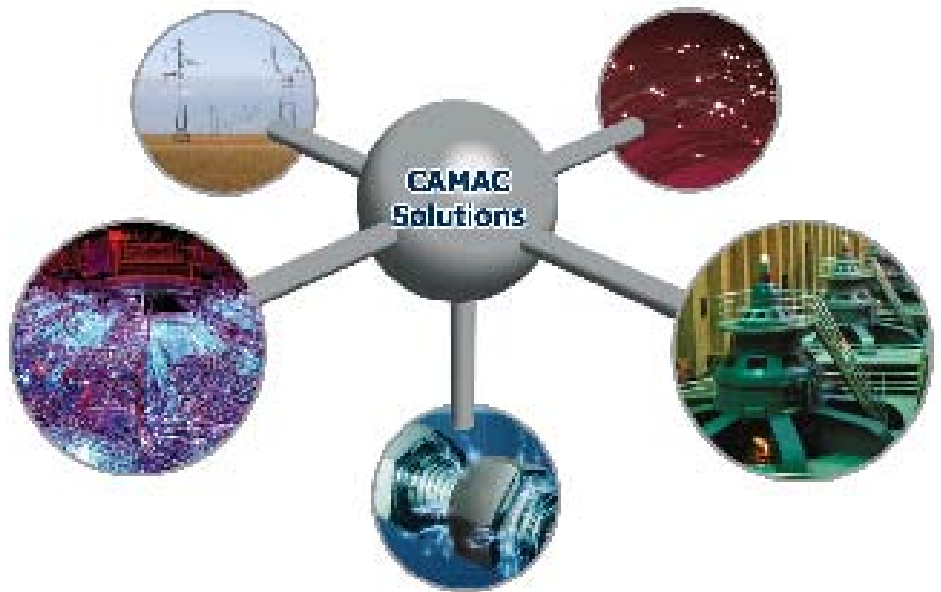
CAMAC, Computer Automated Measurement And Control, is an IEEE-standard (583), modular, high-performance, realtime data acquisition and control system concept.

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

### APPLICATIONS

Event monitoring  
Level detectors  
Alarms

## 347C 48-bit Change-of-state Input Register



The Model 3474 is a single-width CAMAC module that includes 48 voltage sense circuits with change-of-state indication.

### FEATURES

- 48-bit voltage sense
- Change-of-state indication
- Inputs can range from +30 to -30 volts DC
- Contains 48-bit memory register & 48-bit comparator
- 100 millisecond input filter



## **GENERAL DESCRIPTION**

The Model 3474 is a single-width CAMAC module providing 48 voltage sense circuits and change-of-state indication. The sense circuits detect changes in the voltage level at the input terminals and are suitable for sensing such remote process signals as limit switches and machine tool relay contacts as well as the transistorized output signals from NC and CNC machines.

In addition to contact sense inputs, this module accepts signals with a potential as high as +/- 30 volts, referenced to module ground. Input current at the switching threshold is 500 microamperes maximum for interfacing with circuits that have a high source impedance. This is accomplished by including a transistor input circuit which is set for a switching threshold of approximately -4.5 volts. A 100 millisecond timing delay on each channel provides noise immunity.

The 3474 contains a 48-bit memory register and a 48-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. The return path for all input circuits is module ground. If isolated inputs are required, the Model 3473 is recommended.

## **OPERATION**

In the initialized state, the input register and the memory register of the 3474 contain the same data pattern. If any input changes state, a not-compare condition exists and the LAM status is set. This produces a LAM request (if enabled). In response to the LAM request, a program can execute an F(2)•A(0) and an F(2)•A(1) command. Executing these commands reads the new state of the inputs, updates the memory register to equal the input states, and clears the LAM status.

To determine the input states before any recent changes, an F(1)•A(0) and F(1)•A(1) command can be performed to read the state of the memory register. This must be done before the F(2) read commands.

Note that the first change-of-state sets the LAM status, and no other indication is given (as other inputs change state) until an F(2)•A(0) or an F(2)•A(1) read-and-clear command is performed. The data staticize latch is disabled during the F(0) and F(2) commands to prevent ambiguous results if inputs are changing during that time.

## **POWER REQUIREMENTS**

+6 volts — 1020 mA

## **WEIGHT:**

.46 kg. (1 lb.)



**ACCESSORIES**

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

**ORDERING INFORMATION**

| MODEL    | DESCRIPTION                           |
|----------|---------------------------------------|
| 3474-A1A | 48-bit Change-of-state Input Register |
|          |                                       |
|          |                                       |
|          |                                       |
|          |                                       |

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