

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

Time-to-digital conversions
Frequency determination of input pulse trains

3664 Time Interval Counter



The Model 3664 is a single-width CAMAC module containing six channels of time interval counters.

FEATURES

- Six-channel capacity
- Eight timing clock frequencies from one hertz to ten megahertz
- 16-bit (65,535) pulse counting per channel
- 24-bit (16,777,215) time intervals per channel
- Individual LAM status for interrupts



GENERAL DESCRIPTION

The Model 3664 is a single-width CAMAC module containing six channels of time interval counters. Data from the module can be used to represent the time elapsed between a Start and a Stop pulse, or it can be used to determine the average frequency of an input pulse train. Each channel contains a 24-bit time interval accumulator and a 16-bit, presettable input pulse counter. Latches are provided to hold the count, thereby eliminating the need to continuously rewrite the pulse counters. Time intervals are derived from a common, crystalcontrolled clock on the module having Dataway selectable frequencies ranging from one hertz to ten megahertz in decade steps. Once the timing cycle has been initiated (via front-panel input signal or Dataway command), the accumulators record timing information until the preset number of input pulses has been received by the 3664. The overflow from each channel's input pulse counter or time interval counter stops the timing sequence and sets a LAM Status bit for that channel. A LAM Mask register allows any LAM stats bit or combination of bits to generate a LAM Request on the Dataway.

The common Start signal and the six pulse inputs are made via single-pin LEMO connectors on the module front panel. The Start signal is a low-true, TTL level pulse which initiates the timing cycle on the high-to-low transition. Strap selections allow either TTL level or optically isolated pulse inputs to be 10-volt signals with pulse counting activated on the low-to-high transition. The maximum frequency of the pulse inputs is five megahertz, and each input sinks 15 milliamperes of current.

FRONT PANEL INDICATORS

N: Flashes whenever the module is addressed L: Indicates that a LAM Request is pending

POWER REQUIREMENTS

+6 volts — 2.8 A

WEIGHT

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

ACCESSORIES

Model 5910-Z1A Single-pin LEMO Connector

ORDERING INFORMATION

MODEL	DESCRIPTION
3664-L1A	6-channel Time Interval Counter

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KineticSystems Company, LLC

900 N. State St. Lockport, IL 60441-2200

Toll-Free (US and Canada):

phone 1-800-DATA NOW 1-800-328-2669

Direct:

phone +1-815-838-0005 fax +1-815-838-4424

Email:

mkt-info@kscorp.com

To find your local sales representative or distributor or to learn more about KineticSystems' products visit:

www.kscorp.com