

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEITHLEY

Keithley CTM-05A Counter / Timer Board

The Keithley CTM-05A is a counter/timer board designed for precise timing and counting applications. It offers versatile functionality for frequency measurement, period measurement, pulse width measurement, and event counting. Ideal for automated testing, data acquisition, and process control.



MODEL Keithley CTM-05A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU CTM-05A	LISTING https://aumictechlabs.com/products/ctm-05a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley CTM-05A is an ISA-bus counter/timer board for PC-based test systems, delivering precise timing and event measurements across five independent 16-bit counters. Built around the industry-standard 9513 counter/timer chip, it supports frequency, period, pulse width, and event counting up to 7 MHz input rates. The board enables software linking of all five counters to construct 32-, 48-, 64-, or 80-bit counting chains, making it suitable for automated testing, data acquisition, and process control requiring high-resolution timing accuracy. Technical Specifications Counter Architecture Five independent 16-bit counters with up/down counting in binary or BCD format Maximum input rate: 7 MHz Load and Hold Registers on each counter Frequency measurement to 7.5 MHz (requires two adjacent counters) Pulse width measurement: 70 ns minimum (high and low) Period measurement supported Pulse Output Capabilities Available on channels 0-4 Minimum pulse width: 2 μ s Minimum pulse period: 4 μ s Maximum pulse period:

2,147 seconds Event Counting 16-bit mode (channels 0–4): maximum 65,535 counts 32-bit mode (channels 0–3): maximum 4,294,901,760 counts Onboard Time Base Selectable 1 MHz or 5 MHz Accuracy: $\pm 0.01\%$ over 0–70°C Digital I/O 8-bit input and 8-bit output ports Counter inputs software-selectable for active-high or active-low Hardware or software gating per counter 40-pin header for digital I/O connector Electrical Characteristics Input low: 0.8 V max, 1 mA max current Input high: 2.2 V min, $-10\ \mu\text{A}$ max current Output low: 0.4 V max at 3.2 mA Output high: 2.4 V min at $-200\ \mu\text{A}$ Key Features Software-linked counter chains up to 80 bits Dual-mode counting (binary or BCD) TTL-compatible I/O levels Hardware and software gating control Compatibility & Integration Standard 37-pin D-type male connector with mating 37-pin D-female (ITT/Canon DC37S equivalent). Optional accessories include CA4037 cable, STC-37 screw terminal connector, STA-U Screw Terminal Board, and STP-37 Screw Terminal Panel (with C1800 cable).

Features & description

From manufacturer datasheet

Features

- Single Am9513A versus two on CTM-10

Applications

- Alarm comparators on counters 1 and 2

CTM05A Characteristics / Specifications

PARAMETER	VALUE
Model	CTM-05A
Manufacturer	Keithley (MetraByte / Keithley DAQ)
Instrument Type	Five channel counter timer ISA board
Alias	CTM-05/A; CTM-05A; CTM-05
Counter chip	one Am9513A (unit A)
Counter channels	five independent 16 bit up/down
Digital inputs	eight latched (port A)
Digital outputs	eight latched
Maximum input frequency	7 MHz
Counting modes	up/down, binary, or BCD
Time base	1 MHz or 5 MHz crystal with divider
Default time base select	1 MHz at power-up (FREQ=0); 5 MHz when FREQ=1
Digital input logic	LSTTL 74LS373 transparent latch
Strobe	data held while strobe is low
Digital output sink	8 mA, five standard TTL or 20 LSTTL loads
Default base address	300h (change if conflict)
Interrupt	software selectable source (counter outputs or external) plus jumper levels CE: fully meets CE certification
Related CTM	ten counters, 16 in / 16 out, two Am9513A
Accessories	STC-37, STA-U, STP-37 screw terminals; C1800 class cables
Bus	IBM PC/XT and Pentium compatible ISA
Functions	event count, pulse width, frequency, pulse generation
Gate source	programmable count gate/source selection
Output	one-shot or continuous, complex duty cycle
Form	half/full size ISA counter board class
Software	DriverLINX; mode software up to four CTM-05/A

PARAMETER

VALUE

Not analog DAQ

counter/timer plus digital I/O only Notes Specs from Keithley CTM-10 and CTM-05/A User's Guide. Confirm ISA slot, base address 300h, and 1 MHz versus 5 MHz time-base jumper/register. Not a 2790 contact-test module.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	CTM-05A
Manufacturer	Keithley (MetraByte / Keithley DAQ)
Instrument Type	Five channel counter timer ISA board
Specifications	
PARAMETER	VALUE
Alias	CTM-05/A; CTM-05A; CTM-05
Counter chip	one Am9513A (unit A)
Counter channels	five independent 16 bit up/down
Specifications	
PARAMETER	VALUE
Digital inputs	eight latched (port A)
Digital outputs	eight latched
Maximum input frequency	7 MHz
Specifications	
PARAMETER	VALUE
Counting modes	up/down, binary, or BCD
Time base	1 MHz or 5 MHz crystal with divider
Default time base select	1 MHz at power-up (FREQ=0); 5 MHz when FREQ=1
Specifications	
PARAMETER	VALUE
Digital input logic	LSTTL 74LS373 transparent latch
Strobe	data held while strobe is low
Digital output sink	8 mA, five standard TTL or 20 LSTTL loads

Specifications

PARAMETER	VALUE
Default base address	300h (change if conflict)
Interrupt	software selectable source (counter outputs or external) plus jumper levels
CE	fully meets CE certification

Specifications

PARAMETER	VALUE
Related CTM 10	ten counters, 16 in / 16 out, two Am9513A
Accessories	STC-37, STA-U, STP-37 screw terminals; C1800 class cables
Bus	IBM PC/XT and Pentium compatible ISA

Specifications

PARAMETER	VALUE
Functions	event count, pulse width, frequency, pulse generation
Gate source	programmable count gate/source selection
Output	one-shot or continuous, complex duty cycle

Specifications

PARAMETER	VALUE
Form	half/full size ISA counter board class
Software	DriverLINX; mode software up to four CTM-05/A
Not analog DAQ	counter/timer plus digital I/O only

Notes

Specs from Keithley CTM-10 and CTM-05/A User's Guide. Confirm ISA slot, base address 300h, and 1 MHz versus 5 MHz time-base jumper/register. Not a 2790 contact-test module.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.