



# M227 3 Channel Programmable Clock/Counter/ Timer M-Module

The M227 provides a variety of clock, counter, and timer functions, including a number of derived counter outputs and three 32-bit counters. The module has a very flexible architecture that allows extensive user definition of the input and output signals. In addition to producing precision clock signals, the instrument can be used to perform counting, pulse width, period, and interval measurements.

## Specifications:

### Features:

- On-board 50 MHz oscillator
- Three Pre-loadable 32-bit Up/Down Counters with Programmable Match Functions
- Two Programmable 32-bit Dividers
- Flexible Asynchronous or Synchronous Gating/Trigger Functions
- On-the-fly Synchronous Latching of 32-bit Count Values
- Easily Perform Pulse Width, Period, and Interval Measurements
- Programmable Outputs
- Interrupt and M-Trigger Support
- On-board oscillator can be disciplined to an external signal to provide increased accuracy and long term stability

### On-Board Oscillator:

Accuracy	±50ppm
Frequency	50MHz

### Front Panel Inputs (2):

Input Threshold	0.8V or 1.4V
Impedance	50Ω or >900KΩ

Each input is programmable as either the Sample Clock or Run Enable

### Derived Outputs:

Level	5.0V
Output Impedance	50Ω

### I/O Connector:

5-pin 5W5S D-Sub Socket connector with 50Ω coaxial contacts

### Power:

+5V	TBD ma
+12V	TBD ma
-12V	TBD ma

## M Module Compliance

Complies with ANSI/VITA Std. 12-1996 for single-wide MA Modules

Addressing	A8
Data	16/32 Bit
Interrupts	INTB
Triggers	TRIGA/B

## Temperature:

Operating	0°C to 50°C
Storage	-40°C to 70°C
TBD ma	

## Applications

- Precision Clock Source
- Pulse Counting
- Time measurement
- Precision triggering of data acquisition equipment

## Ordering Information

11030380-0001

## Additional Information

User Manuals for C&H carriers and this module can be found on our website at [www.chtech.com](http://www.chtech.com).