



M207 Precision Oscillator

The M207 is a precision oscillator source that provides a highly accurate and stable clock reference that can be used as a frequency or time reference. Using selectable switches, the output of the on-board ovenized oscillator can be output as is or be divided by any value from 2 to 16383. The resulting output can be directed to a front SMA connector and/or to either or both of the M-Module triggers. The output can be a 100ns pulse or a square wave.

M Module Compliance

Complies with ANSI/VITA Std. 12-1996 for single-wide M-Modules; however, the module does require or support data transfers.

Compatible with VXI, VME, PCI, cPCI and other M Module carriers.

Applications

- Frequency or Time Reference
- M-Module Triggering
- Synchronization of data acquisition hardware

Ordering Information

Part Number 11028610-0001

Additional Information

User Manuals for C&H carriers and this module can be found on our website at www.chtech.com.



Specifications:

Ovenized Oscillator:

Nominal Frequency:	10MHz
Stability (Freq. vs. Temp)	±0.01ppm
Aging (Freq. vs. Time)	
1 st year	±0.1ppm
10 years	±1.0ppm
Cal. (Freq. vs. Control)	±1.0ppm
Warm Up (Freq. Ref. to 1 hr.)	
5 minutes	±0.1ppm
30 minutes	±0.01ppm

Front panel accessible calibration 25-turn potentiometer provided for 10 year adjustability.

Pulse Output: (front panel)

High, I _{OH} = -24mA	3.76V min.
Low, I _{OL} = 24mA	0.44V max.
Source/Sink	±50mA
Rise/Fall (0.8 to 2.0V)	1.5ns
Impedance (selectable)	3 or 50Ω

Pulse Width: 100ns*

* Pulse width is 50% of period when "Square Wave Output" or "No divide" output is selected.

Outputs:

- Front Panel
- M-Module Trig A
- M-Module Trig B

Switch Controls:

- Divide-by-N Value (3 to 16383)
- Clock Out Select
 - Square Wave Output (N ÷ 2)
 - Divide-By-2
 - No divide (10MHz output)
 - Divide-By-N
- M-Trigger A/B Output Enable
- Front Panel Output Enable
- Front Panel Output Impedance

Front Panel Connector: SMA

Temperature:

Operating:	0°C to 50°C
Storage:	-40°C to 70°C

Power:

+5V (during warm-up)	500mA
+5V (after warm-up)	250mA