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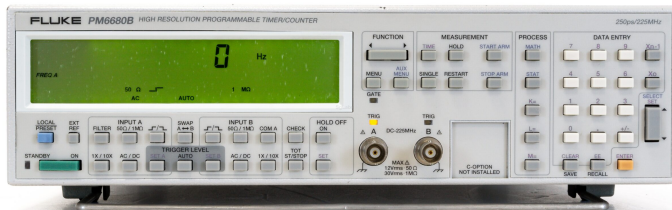
Data Sheet

August 14, 2026

FLUKE

Fluke PM6680B High Resolution Timer/Counter Programmable

The Fluke PM6680B is a high performance frequency counter/timer in the PM6680 family for frequency period and time interval measurements. OEM PM6680 literature emphasizes multi-channel inputs, high resolution reciprocal counting, and GPIB automation adjacent to the PM6681 higher-resolution sibling. General purpose frequency and time interval measurements, production test counting, and automated GPIB frequency monitoring. Reciprocal high resolution counting class Instrument Family: Fluke PM6680B frequency counter/timer General purpose frequency and time interval measurements, production test counting, and automated GPIB frequency monitoring. Reciprocal high resolution counting class Instrument Family: Fluke PM6680B frequency counter/timer Measurement Functions: frequency period time interval class



MODEL

Fluke PM6680B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

PM6680B

LISTING

<https://aumictechlabs.com/products/pm6680b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke PM6680B is a high-resolution timer/counter with programmable automation for precision frequency, time interval, and timing measurements across laboratory, research, and manufacturing environments. It delivers 10-digit frequency resolution in 1 s measuring time and

sub-nanosecond time interval accuracy, with full SCPI command compliance and IEEE-488 bus control supporting up to 125 triggered measurements per second. Technical Specifications

Frequency Measurement Input A: DC to 225 MHz (AC-coupled 10 Hz to 225 MHz); 4.2 GHz with optional module Input B: DC to 100 MHz Input C: Up to 4.2 GHz (optional) Resolution: 10 digits in 1 s measuring time Time Interval & Pulse Measurements Single-shot resolution: 250 ps Averaged resolution: 100 ps Range: 0 ns to 10^{10} s Rise/fall time: 3 ns to 10^{10} s (up to 160 MHz) Pulse width: 3 ns to 10^{10} s (up to 160 MHz) Period: 6 ns to 10^{10} s Additional Measurements Duty factor: 0 to 1 (0.11 Hz to 160 MHz) Phase (A relative B): -180° to $+360^{\circ}$ with 0.01° resolution (0.03 Hz to 160 MHz) Ratio (A/B, C/B): 10^{-9} to 10^{15} Totalization: 0 to 10^{17} (8 modes including simultaneous up/down counting) Frequency burst: Measures burst frequency and PRF with selectable start delay Peak reading voltmeter: 4-digit, 120 MHz Signal Conditioning Input impedance: $1\text{ M}\Omega \parallel 15\text{ pF}$ Sensitivity: 50 mVrms to 5 Vrms; $20\text{ mV} < 100\text{ MHz}$ on Channel C Input coupling: AC/DC selectable Trigger level: $\pm 5\text{ V}$ Timebase & Stability Standard timebase with optional TCXO, high-stability oven, and very high-stability oven modules Time base stability: $< 5 \times 10^{-11}$ per month (with oven options) Key Features Programmable all front-panel functions; macro programming for user-defined mnemonics Internal memory: Up to 2,600 readings with internal transfer rate to 2,000 measurements/s Arming input with inhibit capability; preset time or trigger event delay IEEE-488 bus compliance with SH1, AH1, T6, L4, SR1, RL1, DC1, DT1, E2 interface functions SCPI command set compliant Typical Applications Frequency and period measurements on digital and RF signals; timing analysis in prototype validation; automated test sequences in production environments; burst signal characterization; duty cycle and phase relationship analysis. Compatibility & Integration Full IEEE-488 programmability enables system integration with automated test systems. SCPI compliance ensures compatibility with standard software frameworks. Internal memory supports standalone logging without external controllers.

PM6680B Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Fluke PM6680B frequency counter/timer
Measurement Functions	frequency period time interval class
Channel Count Class	multi channel
Frequency Range Basic Channels Class	DC to hundreds of MHz class
Resolution Class	high resolution reciprocal counting
Remote Interface	GPIO
Timebase Options	OCXO class options on family
Display	digital counter display
Form Factor	benchtop
AC Powered	yes
Input Sensitivity Class	mV rms class
Trigger Level	adjustable class
Arming	internal external class
Statistics	mean stdev class on family
Series Family	Fluke PM6680
Sibling Higher Resolution	PM6681
Input Impedance Class	1 MOhm / 50 ohm selectable class
Manufacturer	per instrument faceplate branding
Documentation Basis	OEM datasheet or operating manual family
Specification Ambient Class	23 C class unless otherwise stated
Calibration Traceability Class	standards laboratory traceable class

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.

performance frequency counter/timer in the PM6680 family for frequency period and time interval measurements. OEM PM6680 literature emphasizes multi-channel inputs, high resolution reciprocal counting, and GPIB automation adjacent to the PM6681 higher-resolution sibling.

Applications
General purpose frequency and time interval measurements, production test counting, and automated GPIB frequency monitoring.

Key Features
Reciprocal high resolution counting class
Multi channel inputs
GPIB programmability
Optional high stability timebase
Benchtop counter form factor

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Instrument Family	Fluke PM6680B frequency counter/timer
Measurement Functions	frequency period time interval class
Channel Count Class	multi channel
Frequency Range Basic Channels Class	DC to hundreds of MHz class

Optional Microwave Channel Class: GHz options on family

Specifications

PARAMETER	VALUE
Resolution Class	high resolution reciprocal counting
Remote Interface	GPIB
Timebase Options	OCXO class options on family
Display	digital counter display
Form Factor	benchtop
AC Powered	yes
Input Sensitivity Class	mV rms class
Trigger Level	adjustable class
Arming	internal external class
Statistics	mean stdev class on family
Series Family	Fluke PM6680
Sibling Higher Resolution	PM6681

PARAMETER	VALUE
Input Impedance Class	1 MOhm / 50 ohm selectable class
Manufacturer	per instrument faceplate branding
Documentation Basis	OEM datasheet or operating manual family
Specification Ambient Class	23 C class unless otherwise stated
Calibration Traceability Class	standards laboratory traceable class

Notes
Family capability rows from Fluke PM6680B literature adjacent to PM6681 verified tables. Confirm exact frequency ceilings and options on the PM6680B datasheet revision.

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

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