

Choose a Solution or Product category, then press Go

Analog Oscilloscopes PM 3082/84/92/94 Specifications

[Product Home](#) | [Features](#) | [Specifications](#) | [Models, Options & Accessories](#)

- [Autoset and Autocal](#)
- [Vertical Deflection](#)
- [Horizontal Deflection](#)
- [Triggering \(MTB & DTB\)](#)
- [X Deflection](#)
- [Cursor Measurements](#)
- [Interfaces](#)
- [Power Supply](#)
- [Mechanical Data](#)
- [Warranty](#)
- [Miscellaneous](#)

Autoset and Autocal

Autoset	Selects proper channel, time-base and trigger settings. Function can be customized.
Autocal	Automatic fine adjustment for enhanced accuracy to get optimal performance even under extreme environmental conditions

Vertical Deflection

Input Channels	(PM3084/94): Four fully attenuated channels (PM3082/92): Two fully attenuated channels, plus two limited attenuated channels (2+2).
Frequency Response	(PM3092/94): DC to > 200 MHz (PM3082/84): DC to > 100 MHz
Display Modes	CH1, (-)CH2, CH3, (-)CH4, Add: CH1 & (-)CH2, CH3 & (-)CH4 In ALTErnate or CHOPped mode.
Bandwidth Limiter	20 MHz -3 db

- All Products
- Automotive Products
- Basic Electrical Testers
- Cable Testers
- Calibrators
- Clamp Meters
- Comm. Test Tools
- Data Acquisition
- Digital Multimeters
- Gas Measurement
- Network Products
- Power Supplies
- Oscilloscopes
- RCL Meters
- Process Products
- Power Quality Tools
- ScopeMeters
- Thermometers
- Signal Sources
- Timer/Counters
- TV Generators

Rise Time (Calculated)	(PM3092/94): < 1.75 ns (PM3082/84): < 3.50 ns
Deflection Coefficient	CH1 & CH2 (all models): 2 mV/div to 5 V/div in a 1-2-5 Sequence or continuously calibrated control, 2 mV/div to 12.5 V/div Ch3 & Ch4 (PM3082/92): 0.1 V/div and 0.5 V/div only Ch3 & Ch4 (PM3084/94): 2 mV/div to 5 V/div in a 1-2-5 Sequence or continuously calibrated control, 2 mV/div to 12.5 V/div
Error Limit	1.3% measured over 6 central vertical divisions.
Input Impedance	1 Ω \pm 1% // 2 pf and 50 Ω (PM 3094 and CH1 & CH2 of PM 3092)
Max. Rated Input Voltage	In 1 M Ω position: 150 Vrms CAT III In 50 Ω position: 5 Vrms; 50 V ac peak (max of 50 m Joules during any 100 ms interval)

Horizontal Deflection

Display Modes	Main TB and/or Delayed TB, X-deflection.
Main Time Base	Time Coefficients: (PM 3092/94) 0.5 s/div to 20 ns/div in a 1-2-5 sequence, 1.25 s/div to 20 ns/div continuously calibrated control. (PM 3082/84) 0.5 s/div to 50 ns/div in a 1-2-5 sequence, 1.25 s/div to 50 ns/div continuously calibrated control. Error Limit (magn 1X): \pm (1.3% of reading + 0.5% of 8 divisions) Hold Off: Up to 20 divisions of MTB setting (max 2 sec)
Delayed Time Base	Time Coefficients: (PM 3092/94) 0.5 ms/div to 20 ns/div in a 1-2-5 sequence. (PM 3082/84) 0.5 ms/div to 50 ns/div in a 1-2-5 sequence. Fastest Sweep: (PM 3092/94) 2 ns/div (magn 10X) (PM 3082/84) 5 ns/div (magn 10X) Error Limit (magn 1X): \pm (1.3% of reading + 0.5% of 8 divisions) Trace Separation: \pm 34 div

Triggering (MTB & DTB)

Trigger Modes	Auto free run, Triggered, Single, Edge triggering, TV triggering

Edge Triggering	<p>MTB Trigger Source: CH1 to CH4, Composite, Line(Mains)</p> <p>DTB Trigger Source: CH1 to CH4, TV-Line</p> <p>Slope: Positive or Negative</p> <p>Coupling: DC, AC (10 Hz), Lf-rej (30 kHz), Hf-rej (30 kHz)</p> <p>Level Range: ± 8 div or level within signal peak to peak range.</p> <p>Level Indication: On screen level indicators and numeric readout.</p> <p>Trigger Sensitivity: (PM 3092/94) 0.5 div up to 100 MHz, 1.0 div up to 200 MHz, 2.0 div up to 300 MHz (PM 3082/84)) 0.5 div up to 50 MHz, 1.0 div up to 100 MHz, 2.0 div up to 200 MHz</p>
TV Triggering	<p>Video Standard: HDTV, NTSC, PAL, SECAM standards</p> <p>MTB Trigger Source: CH1 to CH4, Field1, Field2, TV-Line</p> <p>Signal Polarity: Positive or Negative</p> <p>Sensitivity: 0.7 div (Sync Pulse)</p>

X Deflection

Deflection Source	CH1 to CH4, Line(Mains)
Deflection Coefficient	See vertical deflection
Dynamic Range	20 div up to 100 kHz, > 10 div up to 2 MHz
Frequency Response	2 MHz -3db
Error Limit	5% measured over central 6 divisions
Phase Shift	< 3o up to 100 kHz

Cursor Measurements

Cursor Modes	Manual positioning: Horizontal, Vertical, Both Auto Positioning: Vp-p or 10-90% or 20-80%
Auto Positioning	Vp-p or 10-90% or 20-80%
Readout	Vertical: dV, V1&V2 to GND, Ratio Horizontal: dt, 1/dt (in Hz), Ratio, Phase Auto Positioning: Vpp, Vp+ & Vp- to GND, Vdc and Trise
Accuracy (magn 1X)	$\pm 1\%$ of full scale. Within the central 8 horizontal and 6 vertical divisions for manual cursor positioning.

Interfaces

RS 232C	9 Pin D.Connector
GPIB/IEEE 488.2	Factory installed option, SCPI Protocol

Power Supply

Line Voltage	100V to 240V ($\pm 10\%$) CAT II
Line Frequency	50 Hz to 400 Hz ($\pm 10\%$)
Power Consumption	60W (80W with all options installed)

Mechanical Data

Size (excluding handle & feet)	139 mm H x 341 mm W x 481 mm L 5.5 in. H x 13.4 in. W x 18.9 in. L
Weight	8.5 kg 20 lb

Warranty

Warranty	Three-year product warranty, parts and labor. Five year CRT warranty.
----------	---

Miscellaneous

Setting Memory	10 Instrument setups in non-volatile memory
Calibration Output	2 kHz square wave 600 mV p-p
Z-Modulation Input	BNC, 10 k Ω 3 2.4V=blanked, 3 0.5 V=unblanked
Time Between Calibration	2000 Hrs or 1 year 4000 Hrs or 2 years if error limits are doubled