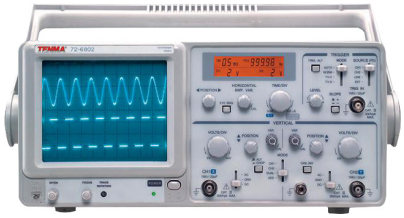
30MHz Analog Oscilloscope
2-Channels



Description

The 30MHz establishes a new benchmark for economical analog oscilloscopes. Innovative functions, including an LCD readout display, frequency counter, and an Auto Time-Base setting are standard features. A 1mV/div vertical sensitivity is able to capture small signal variations from input sources. Additional functions such as XY mode display, MAG function (magnified time base), and Z-axis Input make the product suitable for both education and industry use. The added value of the product makes it one of the most beneficial choices among entry-level analog oscilloscopes available in today's market.

Features

- 1mV/div High Vertical Sensitivity
- Internal 5 Digits Real-Time Frequency Counter
- LCD Readout Display for Vertical/Horizontal/Frequency Measurement
- Auto Time-Base Setting
- Buzzer Alarm
- TV(TV-V, TV-H) Trigger Modes
- XY Mode
- Z-Axis Input and External Trigger Input

Specifications

Vertical Axis	
Sensitivity	1mV to 5V/div , 12 steps in 1-2-5 sequence
Accuracy	≤3%, (1mV/div, 2mV/div : ≤5%)
Vernier Vertical Sensitivity	≤1/2.5 of panel-indicated value
Bandwidth	DC ~ 30MHz (1mV/div, 2mV/div: DC ~ 7MHz)
Rise Time	Approx. 11.7ns (1mV/div, 2mV/div: Approx. 50ns)
Input Impedance	Approx. 1MΩ/ Approx. 25pF
Square Wave Characteristics	Overshoot : 5% (At 10mV/div range)
Linearity	<±0.1div of amplitude change
Vertical Modes	CH1, CH2, DUAL (ALT/CHOP), ADD
Chopping Repetition Frequency	Approx. 250kHz
Input Coupling	AC, DC, GND
Max. Input Voltage	CAT II 300V(DC+ACpeak)
Common Mode Rejection Ratio	50:1 or better at 50kHz sinusoidal wave
Isolation Between Channels	>1,000:1at 50kHz, >30:1at 30MHz(at 5mv/div Range)
CH1 Signal Output	At least 20 mV/div at 50Ω terminal, frequency at least 50Hz to 5MHz

Triggering	
Triggering Source	CH1, CH2, ALT, LINE, EXT
Coupling	AC : 20Hz to full bandwidth
Slope	+ / -
Sensitivity	20Hz ~ 2MHz : 0.5 div, TRIG-ALT : 2 div, EXT : 200mV 2MHz ~ 30MHz : 1.5 div, TRIG-ALT : 3 div, EXT : 800mV TV : Sync pulse more than 1 div (EXT: 1V)
Triggering Modes	Auto , Norm , TV-V , TV-H
EXT Triggering Signal Input	
Input Impedance	Approx. 1MΩ / approx. 25pF
Maximum Input Voltage	CATII 300V(DC+AC peak)
Horizional Axis	
Sweep Time	0.2μS ~ 0.5 S/div, 20 steps in 1-2-5 sequence
Sweep Time Accuracy	±3%
Vernier Sweep Time Control	≤1/2.5 of panel-indicated value
Sweep Magnification	10 times
× 10MAG Sweep Time Accuracy	±5% (20nSec ~ 50nSec are uncalibrated)
Linearity	±3%, ×10MAG: ±5% (20ns and 50ns are uncalibrated)
X-Y Mode	
Sensitivity	Same as vertical axis
Bandwidth	DC to at least 500kHz
X-Y Phase Difference	≤0 3° at DC ~ 50kHz
Z Axis	
Sensitivity	5 Vp-p (Positive-going signal decreases intensity)
Bandwidth	DC ~ 2MHz
Input Resistance	Approx. 47kΩ
Maximum Input Voltage	CATII 30V(DC+AC peak)
Calibration Voltage	
Waveform	Positive-going Square wave
Frequency	Approx. 1 kHz
Duty Ratio	Within 48:52
Output Voltage	2 Vp-p 2%
Output Impedance	Approx. 1kΩ
Frequency Counter	
Display Digits	Max. 5-digits decimal
Frequency Range	50Hz ~ 30MHz
Accuracy	±0.05% : 50Hz ~ 1kHz, ±0.02% : 1kHz ~ 30MHz
Measuring Sensitivity	> 2div

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LCD	
Display	VOLT/div, TIME/div, X-Y Mode, Frequency
Backlight	Orange
CRT	
Type	6-inch rectangular type, internal graticule
Phosphor & Acceleration Voltage	P 31 & Approx. 2kV
Effective Screen Size	8 × 10 div (1 div = 10mm (0.39in))
Graticule	Internal
Trace Rotation	Provided
Power Source	
115V AC, 230V ±15% selectable, 50Hz or 60Hz	
Storage Temperature & Humidity	
-10°C to 70°C ; 70%RH (Max.)	
Dimensions & Weight	
310mm(W) × 150mm(H) × 455mm(D); Approx. 8.2kgs (18.0lbs)	

Accessories:

User manual × 1, Power cord × 1

Probe: 60MHz (10 : 1/1 :1) Switchable Passive Probe (one per channel)

Part Number Table

Description	Part Number
30MHz 2-Channel Analog Oscilloscope	72-6802