

TEKTRONIX

THS720

The Tektronix THS720 is a rugged, handheld 100 MHz digital storage oscilloscope and digital multimeter (DMM) designed for field service and industrial troubleshooting. Featuring IsolatedChannel™ architecture with 600 V RMS CAT II ratings, it integrates laboratory-grade oscilloscope capabilities with a highly reliable 3-3/4 digit digital multimeter in a portable, battery-powered form factor.

SPECIFICATIONS

General

Interfaces	Optically isolated RS-232 serial interface
Display	4.7-inch (120 mm) monochrome backlit LCD, 320 x 240 pixels

Physical

Power Supply	115/230 V AC adapter (12 V DC output) or internal rechargeable NiCd battery pack
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	177 mm x 217 mm x 51 mm mm
Weight	1.45 kg kg

Vertical System

Analog Bandwidth	100 MHz
Calculated Rise Time	3.5 ns
Number of Input Channels	2 isolated channels
Input Coupling	AC, DC, GND
Input Impedance	1 MΩ ± 1% in parallel with 25 pF ± 5 pF
Input Sensitivity Range	5 mV/div to 50 V/div
Vertical Resolution	8-bit
Maximum Input Voltage (BNC to Common)	300 V RMS CAT III
DC Gain Accuracy	±2%
Offset Range	±5 divisions

Horizontal System

Timebase Range	5 ns/div to 50 s/div
Timebase Accuracy	±100 ppm

Acquisition System

Maximum Real-Time Sample Rate	500 MS/s per channel
Maximum Record Length	2500 points per channel
Acquisition Modes	Sample, Envelope, Average, Peak Detect (8 ns glitch capture)

Trigger System

Trigger Sources	Channel 1, Channel 2, External (via DMM input)
Trigger Modes	Auto, Normal, Single
Trigger Types	Edge, Pulse (width, glitch), Video (NTSC, PAL, SECAM)
Trigger Coupling	DC, AC, HF Reject, LF Reject, Noise Reject

Waveform Measurements and Analysis

Automatic Measurements	Period, Frequency, +Width, -Width, Rise Time, Fall Time, Max, Min, Peak-to-Peak, Amplitude, High, Low, Mean, Cycle Mean, RMS, Cycle RMS
Waveform Math Operators	Add, Subtract, Multiply
Waveform Storage	10 reference waveforms
Setup Storage	10 user-defined setups

Digital Multimeter (DMM)

DMM Resolution	3-3/4 digits (4000 counts)
DMM Functions	DC Voltage, AC Voltage, Resistance, Continuity, Diode Test
DMM DC Voltage Range	400.0 mV to 800.0 V
DMM AC Voltage Range	400.0 mV to 640.0 V
DMM Resistance Range	400.0 Ω to 40.00 M Ω
DMM Continuity Threshold	Audible alert at less than 50 Ω

Power Specifications

Battery Operating Time	Up to 2 hours
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Environmental and Compliance

Storage Temperature	-20 °C to +60 °C
Relative Humidity	90% RH (0 °C to 30 °C), 75% RH (30 °C to 40 °C), 45% RH (40 °C to 50 °C)
Operating Altitude	Up to 3,000 meters (9,842 feet)

Isolation & Safety

Max Float Voltage (BNC Common to Earth Ground)	600 V RMS CAT II, 300 V RMS CAT III
Max Channel-to-Channel Float Voltage	250 V RMS CAT II

DMM Performance

DMM DC Voltage Accuracy	$\pm(0.5\%$ of reading + 5 counts)
DMM AC Voltage Accuracy	$\pm(2\%$ of reading + 5 counts)
DMM Resistance Accuracy	$\pm(0.5\%$ of reading + 5 counts)
DMM Diode Test Current	0.5 mA typical
DMM Input Impedance	10 M Ω

Triggering

Video Triggering Standards	NTSC, PAL, SECAM
Pulse Width Trigger Range	50 ns to 2.5 s

Safety & Environmental

Safety Compliance	UL3111-1, CSA C22.2 No. 1010.1, EN61010-1
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Power & Battery

Battery Charge Time	9 hours (internal) / 1.5 hours (external fast charger)
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Measurements

Cursor Measurements	Delta Volts, Delta Time, 1/Delta Time (Frequency)
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DMM

DMM Data Logger	Saves up to 100 readings with graphical roll display (from 4 minutes to 24 hours)
DMM Maximum Input Voltage	1000 VDC, 750 VAC RMS (CAT II); 600 VAC RMS (CAT III)
DMM Diode Test Open-Circuit Voltage	3.0 V

Acquisition

Roll Mode Range	Available at sweep speeds from 50 ms/div to 50 s/div
Waveform Interpolation	Sin(x)/x

Power

Battery Chemistry	Nickel-Cadmium (NiCd)
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TECHNOLOGY

Digital Real-Time (DRT) Handheld Oscilloscope

APPLICATIONS

Field service, industrial maintenance, power electronics troubleshooting, and general electronic testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.