

TEKTRONIX

THS720A

The Tektronix THS720A is a member of the THS700 TekScope Series, combining a 100 MHz, 500 MS/s dual-channel digital real-time oscilloscope with a True RMS digital multimeter in a rugged, battery-operated handheld design. Featuring independent, isolated floating channels and integrated analysis capabilities, it is designed for both benchtop testing and demanding field service applications.

SPECIFICATIONS

General

Interfaces	RS-232
Display	High-contrast backlit monochrome LCD, 320 × 240 resolution

Physical

Power Supply	NiCd rechargeable battery pack or AC power adapter/charger
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	177 mm × 217 mm × 51 mm mm
Weight	1.45 kg kg

Vertical System

Analog Bandwidth (-3 dB)	100 MHz
Calculated Rise Time (10% to 90%)	3.5 ns
Number of Channels	2 isolated scope channels plus 1 DMM channel
Input Impedance	1 MΩ 25 pF
Input Coupling	AC, DC, GND
Vertical Sensitivity Range	5 mV/div to 50 V/div (with 1X probe)
Vertical Resolution	8-bit
Maximum Input Voltage	600 VRMS CAT II floatable (between channels or channel to earth ground)
Channel-to-Channel Isolation	600 VRMS
DC Gain Accuracy	±2%
Analog Bandwidth Limit	20 MHz
Lower Frequency Limit (AC Coupled)	<10 Hz (without probe)
Probe Attenuation Factor	1X, 10X, 100X, 1000X

Horizontal System

Timebase Range	5 ns/div to 50 s/div
Timebase Accuracy	±0.015%

Acquisition System

Maximum Real-Time Sample Rate	500 MS/s per channel
Maximum Record Length	2500 points
Glitch Capture	8 ns
Acquisition Modes	Sample, Peak Detect, Envelope, Average
Roll Mode	Yes
Waveform Storage	Up to 10 waveforms
Setup Storage	Up to 10 instrument setups

Trigger System

Trigger Sources	Channel 1, Channel 2
Trigger Modes	Auto, Normal, Single
Standard Trigger Types	Edge
Advanced Trigger Types	Pulse (width, glitch), Video (line count, field select)
Trigger Coupling	AC, DC, Noise Reject, HF Reject, LF Reject
External Trigger Input	No
Internal Trigger Sensitivity	0.35 div (DC to 10 MHz), 1.0 div (10 MHz to 100 MHz)

Waveform Measurements and Analysis

Automatic Measurements	21 measurements
Cursor Measurements	Voltage, Time, ΔV , ΔT , $1/\Delta T$

Digital Multimeter

DMM Resolution	3-3/4 digits (4000 counts)
DMM Functions	DC Voltage, AC Voltage (True RMS), Resistance, Continuity (Beeper), Diode Test
DMM Maximum Input Voltage	600 VRMS
DMM Overload Protection	600 VRMS
Datalogger Mode	Yes

Display and User Interface

Waveform Display Formats	YT, XY
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Power Specifications

Battery Operating Time	Up to 2 hours
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Environmental and Compliance

Storage Temperature Range	-20 °C to +60 °C
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Physical Characteristics

Form Factor	Handheld
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DMM Specifications

DC Voltage Accuracy	±(0.5% + 5 counts)
AC Voltage Accuracy	±(2.0% + 10 counts) (50 Hz to 10 kHz)
Resistance Accuracy	±(0.5% + 2 counts) (4 kΩ to 4 MΩ)
DMM Input Resistance	10 MΩ
Continuity Threshold	<50 Ω

Power System

Battery Chemistry	Nickel-Cadmium (NiCd)
Battery Recharge Time	1.5 hours (external charger) / 9 hours (internal)

Environmental & Safety

Operating Altitude	Up to 2,000 m
Safety Compliance	UL3111-1, CSA C22.2 No. 1010.1, EN 61010-1

Waveform Math

FFT Windows	Rectangular, Hanning, Hamming, Blackman-Harris
FFT Vertical Scales	Linear RMS, dBV RMS
Math Operators	Addition (+), Subtraction (-), Multiplication (×)

Digital Multimeter (DMM)

DMM Display Count	4000 counts (3-3/4 digits)
DMM AC Measurement Type	True RMS
DMM Diode Test Range	0 V to 2 V
DMM Ranging	Auto and Manual
DMM Analog Bargraph	30-segment, updates 30 times/sec

Triggering

Trigger Holdoff Range	250 ns to 12 s
Trigger Level Range	±10 divisions from screen center

Environmental

Shock Resistance	50 g (half-sine, 11 ms duration)
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TECHNOLOGY

Digital Real-Time Oscilloscope & DMM

APPLICATIONS

Electronic troubleshooting, industrial maintenance, and field service power/signal analysis

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