

TEKTRONIX

THS730A

The Tektronix THS730A is a dual-channel handheld digital storage oscilloscope and True RMS digital multimeter from the THS700 Series. Offering a 200 MHz analog bandwidth and a real-time sample rate of 1 GS/s per channel, it combines bench-top performance with the portability of a battery-operated device. The instrument features Tektronix's IsolatedChannel technology for safe floating measurements up to 600 V RMS CAT II, a 3-3/4 digit DMM with datalogger functionality, and extensive triggering capabilities including pulse and video triggering.

SPECIFICATIONS

General

Interfaces	RS-232 (support for printers and PC communication)
Display	High-contrast backlit LCD, 320 × 240 pixels

Physical

Power Supply	NiCd battery pack or AC adapter (120 V AC or 230 V AC input to 12 V DC output)
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	177 mm × 217 mm × 51 mm mm
Weight	1.45 kg kg

Oscilloscope Vertical System

Analog Bandwidth	200 MHz
Number of Channels	2 isolated channels
Vertical Resolution	8 bits
Vertical Sensitivity Range	5 mV/div to 50 V/div
DC Gain Accuracy	±2%
Input Coupling	AC, DC, GND
Input Impedance	1 MΩ 25 pF
Channel-to-Channel Isolation	600 V RMS CAT II, 300 V RMS CAT III

Oscilloscope Horizontal System

Maximum Real-time Sample Rate	1 GS/s
Record Length	2500 points
Time Base Range	2 ns/div to 50 s/div
Time Base Accuracy	±0.01%
Glitch Capture	8 ns
Horizontal Display Modes	Main, Delayed Sweep, Roll

Triggering System

Trigger Sources	Channel 1, Channel 2
Trigger Modes	Auto, Normal, Single
Trigger Types	Edge, Pulse (Width, Glitch), Video
Trigger Coupling	AC, DC, HF Reject, LF Reject, Noise Reject
Video Trigger Formats	NTSC, PAL, SECAM (Line count & Field select)

Measurement & Analysis Functions

Automatic Waveform Measurements	21 measurements
Cursor Measurement Types	Voltage, Time
Waveform Math Operators	Addition, Subtraction
Waveform Storage Capacity	10 waveforms
Setup Storage Capacity	10 setups

Digital Multimeter (DMM)

DMM Resolution	3-3/4 digits (4000 counts)
DMM Functions	DC Voltage, AC Voltage (True RMS), Resistance, Continuity, Diode Test
DC Voltage Ranges	400 mV, 4 V, 40 V, 400 V, 880 V
DC Voltage Accuracy	$\pm(0.5\% + 5 \text{ counts})$
AC Voltage Ranges	400 mV, 4 V, 40 V, 400 V, 640 V
AC Voltage Accuracy	$\pm(2\% + 5 \text{ counts})$ True RMS
Resistance Ranges	400 Ω to 40 M Ω
Resistance Accuracy	$\pm(0.5\% + 5 \text{ counts})$ up to 4 M Ω , $\pm(2.0\% + 5 \text{ counts})$ for 40 M Ω
Continuity Beeper Threshold	Audible tone when $< 50 \Omega$
DMM Input Impedance	10 M Ω
Diode Test Range	2.0 V
Diode Test Current	0.5 mA
Diode Test Open-Circuit Voltage	5.0 V

Connectivity & Isolated Channel Technology

Channel-to-Earth Isolation Voltage	600 V RMS CAT II, 300 V RMS CAT III
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Power System & Battery

Battery Chemistry Type	NiCd
Battery Operating Time	Approx. 1.5 to 2 hours

Safety, Environmental & Physical

Safety Category Ratings	CAT II 600 V RMS, CAT III 300 V RMS
Storage Temperature Range	-20 °C to +60 °C

Vertical System

Rise Time	1.7 ns
Bandwidth Limit	20 MHz

Trigger System

Trigger Level Range	±10 divisions from screen center
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Environmental

Operating Altitude	2000 m
Non-Operating Altitude	15000 m
Operating Vibration	0.31 g RMS (5 Hz to 500 Hz)
Non-Operating Vibration	2.46 g RMS (5 Hz to 500 Hz)

DMM Safety & Input

DMM Maximum Input Voltage	600 V RMS CAT II, 300 V RMS CAT III
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Oscilloscope Safety & Input

Scope Maximum Input Voltage	300 V RMS CAT II (BNC signal to common), 1000 V RMS CAT II (with 10X probe)
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DMM Performance

DMM Crest Factor	3 maximum
DMM AC Voltage Frequency Range	50 Hz to 20 kHz
AC Measurement Type	True RMS

Interfaces & Connectivity

RS-232 Baud Rate	Up to 19,200 bps
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Power Supply & Battery

Internal Battery Charging Time	9 hours (unit off)
Power Consumption	9 W typical

TECHNOLOGY

Digital Storage Oscilloscope & DMM

APPLICATIONS

Electronic testing, industrial troubleshooting, field service

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