

NTP-DO9001R

Digital Oscilloscope

• High Stability • Industrial Grade • Rack Mount



Features

- Supports selectable bandwidth options of **50 / 70 / 100 MHz**, with **4-channel input configurations**
- Provides a **maximum sampling rate of up to 1 GSa/s**
- Features a **maximum memory depth of 10M points per channel** for detailed waveform capture
- Equipped with a **7-inch WVGA LCD display (800 × 480 resolution)**
- Incorporates a **256-level color intensity grading display** to enhance waveform visibility and analysis
- Enables **frequency-domain analysis with FFT resolution up to 1M points**
- Includes a **one-touch zero key** for rapid reset of **time base, voltage scale, and trigger settings**
- Designed with a **compact form factor and modern exterior styling**
- Supports **Interface data communication** for measurement data export and integration with external information systems



Technical Specifications

VERTICAL	Channels	4
	Bandwidth	DC~100MHz(-3dB)
	Rise Time	3.5ns
	Bandwidth Limit	20MHz
	Vertical Sensitivity Resolution	8 bit : 1mV~10V/div
	Input Coupling	AC, DC, GND
	Input Impedance	1M Ω // 16pF approx.
	DC Gain Accuracy*	$\pm 3\%$
	Polarity	Normal & Invert
	Maximum Input Voltage	300Vrms, CAT I (300Vrms CAT II with GTP-070A-4/100A-4 10:1 probe)
TRIGGER	Offset Position Range	1mV/div : $\pm 1.25V$; 2mV/div ~ 100mV/div : $\pm 2.5V$; 200mV/div ~ 10V/div : $\pm 125V$
	Waveform Signal Process	+, -, x, $\div$, FFT, FFTrms, User Defined Expression ; FFT : 1Mpts; FFT : Spectral magnitude. Set FFT Vertical Scale to Linear RMS or dBV RMS ; FFT Window Display : Rectangular, Hamming, Hanning, or Blackman-Harris
	Source	CH1, CH2, CH3*, CH4*, Line, EXT** ; *four channel models only. ; **two channel models only
	Trigger Mode	Auto (supports Roll Mode for 100 ms/div and slower), Normal, Single Sequence
	Trigger Type	Edge, Pulse Width, Video, Pulse Runt, Rise & Fall, Timeout, Alternate, Event-Delay(1~65535 events), Time-Delay (Duration, 4ns~10s), Bus
	Holdoff range	4ns to 10s
EXTERNAL TRIGGER	Coupling	AC, DC, LF rej., Hf rej., Noise rej.
	Sensitivity	1div
	Range	$\pm 15V$
HORIZONTAL	Sensitivity	DC ~ 100MHz Approx. 100mV ; 100MHz ~ 200MHz Approx. 150mV
	Input Impedance	1M Ω $\pm 3\%$ ~16pF
	Time base Range	5ns/div ~ 100s/div (1-2-5 increments)
	ROLL	100ms/div ~ 100s/div
	Pre-trigger	10 div maximum
	Post-trigger	2,000,000 div maximum
	Timebase Accuracy	± 50 ppm over any ≥ 1 ms time interval
	Real Time Sample Rate	1GSa/s max.
	Record Length	Max. 10Mpts
	Acquisition Mode	Normal, Average, Peak Detect, Single
	Peak Detection	2nS (typical)
	Average	selectable from 2 to 256



X-Y MODE	X-Axis Input Y-Axis Input Phase Shift	Channel 1; Channel 3* (*four channel models only) Channel 2; Channel 4* (*four channel models only) ±3° at 100kHz
CURSORS AND MEASUREMENT	Cursors Automatic Measurement Cursors Measurement Auto Counter	Amplitude, Time, Gating available; Unit : Seconds(s), Hz(1/s), Phase(degree), Ration(%) 36 sets: Pk-Pk, Max, Min, Amplitude, High, Low, Mean, Cycle Mean, RMS, Cycle RMS, Area, Cycle Area, ROVShoot, FOVShoot, RPRESshoot, FPRESshoot, Frequency, Period, RiseTime, FallTime, +Width, -Width, Duty Cycle, +Pulses, -Pulses, +Edges, -Edges, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase Voltage difference between cursors (ΔV) Time ; difference between cursors (ΔT) 6 digits, range from 2Hz minimum to the rated bandwidth
CONTROL PANEL FUNCTION	Autoset Save Setup Save Waveform	Single-button, automatic setup of all channels for vertical, horizontal and trigger systems, with undo Autoset 20set 24set
DISPLAY	TFT LCD Type Display Resolution Interpolation Waveform Display Waveform Update Rate Display Graticule Display Mode	7" TFT WVGA color display 800 horizontal x 480 vertical pixels (WVGA) Sin(x)/x Dots, vectors, variable persistence (16ms~4s), infinite persistence 50,000 waveforms per second, maximum 8 x 10 divisions YT, XY
INTERFACE	USB Port Ethernet Port(LAN) Go-NoGo BNC Kensington Style Lock	USB 2.0 High-speed host port x1, USB High-speed 2.0 device port x1 RJ-45 connector, 10/100Mbps with HP Auto-MDIX 5V Max/10mA TTL open collector output Rear-panel security slot connects to standard kensington-style lock
POWER SOURCE		AC 100V ~ 240V , 50Hz ~ 60Hz , Auto selection , Power consumption: 30 Watts
MISCELLANEOUS	Multi-Language Menu Operation Environment Online Help	Available Temperature : 0°C ~ 50°C. Relative Humidity ≤ 80% at 40°C or below; ≤ 45% at 41°C ~ 50°C Available
DIMENSIONS & WEIGHT	380(W) × 208 (H) × 127.3(D)mm, Approx. 2.8kg	

