



GPS-1104XU

Super-Phosphor Oscilloscope



See More. Debug Faster.

The GPS-1104XU is a 100 MHz, 4-channel Super-Phosphor Oscilloscope (SPO) with a maximum sample rate of 1 GSa/s and record length up to 14 Mpts. SPO technology delivers excellent signal fidelity with 256-level intensity grading and a colour temperature display mode not found in comparable models.

An innovative digital trigger system offers high sensitivity and low jitter, with waveform capture up to 400,000 frames/second in sequence mode. Serial bus decoding covers I²C, SPI, UART, CAN, and LIN, and a 128k-point FFT gives high-resolution spectral analysis.

Supplied with 4 matched passive probes and a full accessory set, the GPS-1104XU suits industrial and electronics design, circuit debug, education, and production test applications.

KEY FEATURES

- Serial decoder included (I²C, SPI, UART, CAN, LIN)
- Deep memory up to 14 Mpts
- Innovative SPO technology, 256-level intensity grading
- Advanced math functions with 128k-point FFT
- Masked PASS/FAIL tests with auto measurement statistics
- 38 automatic measurements, plus search and navigate
- Sequence mode with up to 80,000 segments and history playback

IDEAL FOR

- Industrial power design, troubleshooting & maintenance
- Electronics design & circuit debug
- Educational lab & training institutions
- Repair & service
- Production test & quality inspection

TECHNICAL SPECIFICATIONS

GPS-1104XU Super-Phosphor Oscilloscope	
Bandwidth	100 MHz (−3 dB)
Channels	4
Sample Rate	1 GSa/s (1 channel) · 500 MSa/s (2 channels) · 250 MSa/s (4 channels)
Memory Depth	Up to 14 Mpts
Waveform Capture Rate	100,000 wfms/s (normal mode) · 400,000 wfms/s (sequence mode)
Acquisition Modes	Normal, Peak Detect (2 ns), Average (4–1024), ERES (up to 3 bits)
Vertical Resolution	8-bit
Vertical Scale	1 mV/div – 10 V/div (1-2-5 sequence)
DC Gain Accuracy	±3.0% (5 mV/div – 10 V/div) · ±4.0% (≤2 mV/div) · rise time 3.5 ns typical
Bandwidth Limit	20 MHz
Coupling / Impedance	DC, AC, GND · 1 MΩ ± 2% 11 pF ± 2 pF · max. input ≤400 Vpk
Time Base	2 ns/div – 100 s/div · ±25 ppm accuracy
Trigger Types	Edge, Slope, Pulse Width, Window, Runt, Interval, Dropout, Pattern, Video (HDTV)
Trigger Modes	Auto, Normal, Single · hold-off 80 ns – 1.5 s · jitter <100 ps
Serial Trigger & Decode	I ² C, SPI, UART, CAN, LIN (standard, 2 decoders)
Sequence & History	Up to 80,000 segments · history playback of up to 80,000 frames
Measurements	38 automatic parameters with statistics, gating, zoom and reference
Math	FFT up to 128k points · +, −, ×, ÷, d/dt, ∫dt, √
Pass / Fail	Hardware-based, up to 40,000 decisions/s · 3.3 V TTL output
Display	7" TFT-LCD (800×480) · 256-level intensity grading · colour temperature mode
Standard I/O	USB Host, USB Device (USB-TMC), LAN, Pass/Fail, Trigger Out
Remote Control	SCPI over USB-TMC and LAN · VXI-11, Telnet (5024), socket (5025)



WHAT'S IN THE BOX

- GPS-1104XU main unit
- Passive probes (4×, PP510)
- USB cable
- Power cord
- Quick start guide & certificate

STANDARDS · EMC: IEC 61326-1 · Safety: UL 61010-1

POWER · 100–240 Vrms 50/60 Hz, 50 W max

GENERAL SPECIFICATIONS

Code	Item	Part Number
GPS-1104XU	100 MHz, 4-Channel Super-Phosphor Oscilloscope	160312

Register your product at www.gpslimited.com/register-product to activate the 1-year warranty.

MASS

2.6 kg (main unit) / 3.8 kg (with packaging)

OPERATING

0°C to 40°C, ≤85% RH, ≤3000m altitude

WARRANTY

1 year (subject to product registration)

DIMENSIONS

312 × 132.6 × 151 mm (w × d × h)

STORAGE

−20°C to 60°C, ≤15000m altitude (non-operating)

CERTIFICATION

EMC: IEC 61326-1 / EN 55011 Class A · Safety: UL 61010-1, CAN/CSA-C22.2 No. 61010-1