

## FEATURES

- Dual-input oscilloscope, multimeter and recorder
- 5.7in TFT colour LCD
- 32 automatic measurements
- 4 digital filter mode
- Multiple language user interface
- Rechargeable battery pack

## RS PRO RSHS806 Oscilloscope, Handheld, 2 Channels, 60MHz

RS Stock No.: 123-6454



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

RS Pro RSHS800 Series handheld digital oscilloscopes provide oscilloscope, multimeter and recorder (including trends and waveform) functions all in one package. The choice of model is between 60 MHz ( [123-6454](#) ), 100 MHz ( [123-6455](#) ), 150 MHz ( [123-6456](#) ) & 200 MHz ( [123-6457](#) ) bandwidths. These instruments offer stable performance combined with high performance. They have the flexibility in use for both workbench and field applications.

## General Specifications

<b>Series</b>	RSHS1000
<b>Model Number</b>	RSHS806
<b>Oscilloscope Type</b>	Handheld
<b>Bandwidth</b>	60MHz
<b>Low Frequency</b>	≤10Hz
<b>Sampling Type</b>	Real Time, Equivalent
<b>Sampling Mode</b>	Sampling, Peak Detection, Average
<b>Average Time</b>	4, 16, 32, 64, 128, 256
<b>Standard Interfaces</b>	USB
<b>Applications</b>	Outdoor measure, Circuit measure, Wind power, PV power and other new energy equipment test, Automotive electron, electric automobile test, Electric power system, strong electricity test, Industry scenes electric debug testing and measuring, Education and science research, Quality control

### Input System

<b>Input Coupling</b>	AC, DC, GND
<b>Input impedance</b>	1MΩ ±2%. 18pf ±3pf
<b>Probe attenuator</b>	1X, 10X
<b>Probe attenuator Factor Set</b>	1X, 5X, 10X, 50X, 100X, 500X, 1000X
<b>Maximum Input Voltage</b>	CAT IV 300 V (RMS), 424 V (Vp)
<b>Input Sensitivity</b>	2 mV/div to 100 V/div
<b>Channel to Channel Isolation</b>	>35dB
<b>Single Channel Common Mode Rejection Ratio</b>	> 100:1 at 150MHz
<b>Input Channel Connectors Type</b>	BNC

### Vertical System

<b>Maximum Vertical Sensitivity</b>	2mV/div
<b>Minimum Vertical Sensitivity</b>	100V/div
<b>Vertical Resolution</b>	8 bit
<b>DC Gain Accuracy</b>	5mv/div-100v/div:≤±3%
<b>DC Measurement Accuracy (≤200mv/div)</b>	±[3.0%*(  reading  +  offset  )+1% * offset +0.2div+2mV]
<b>DC Measurement Accuracy (&gt;200mv/div)</b>	±[3.0%*(  reading  +  offset  )+1% * offset +0.2div+100mV]
<b>Rise Time</b>	≤5.8ns
<b>Channel Voltage Offset Range</b>	2mV-200mV: ±1.6V
<b>Math Operation</b>	+, -, *, /, FFT
<b>FFT</b>	Window Mode: Hanning, Hamming, Blackman, Rectangular Sampling: 1024 points

### Horizontal System

<b>Real Time Sampling Rate</b>	Single Channel: 50Sa/s~1GSa/s Double Channels: 50Sa/s~500MSa/s
<b>Interaction Mode</b>	X, Sinx
<b>Memory Depth</b>	2Mpts, 1Mpts
<b>Measure Display Mode</b>	MAIN, WINDOW, WINDOW ZOOM, SCAN, X-Y
<b>Time Base Range</b>	5.0ns/div~50s/div
<b>Horizontal Scan Rate</b>	1ns/div to 500s/div

### X-Y Mode

<b>X-Pole Input / Y-Pole Input</b>	Channel 1 (CH1), Channel 2 (CH2)
<b>Sample Frequency</b>	25KSa/s~250MSa/s (1-2.5-5 step)

### Measurement System

<b>Auto Measure</b>	Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg, Mean, Crms, Vrms, ROVShoot, FOVShoot, RPRESshoot, FPRESshoot, Rise time, Fall time, Freq, Period, + Wid, -Wid, + Dut, -Dut, BWid, Phase, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF
<b>Cursor Measure</b>	Manual, Track and Auto

### Trigger Specifications

<b>Trigger Type</b>	Edge, Pulse Width, Video, Slope, Alternative
<b>Trigger Source</b>	CH1, CH2
<b>Trigger Modes</b>	Auto, Normal, single
<b>Trigger Coupling</b>	AC, DC, LF Reject, HF Reject
<b>Trigger Level Range</b>	CH1: $\pm 6$ divisions
<b>Trigger Displacement</b>	Pre Trigger: Memory depth/(2*sampling) Delay Trigger: 260div
<b>Hold-off Range</b>	100ns – 1.5s
<b>Edge Trigger</b>	Edge Type: Rising, Falling, Rising and Falling
<b>Pulse Width Trigger</b>	Trigger Mode: Positive, Negative Pulse width Range : 20ns - 10s
<b>Video Trigger</b>	Support Signal Format: PAL/NTSC Trigger Condition : odd field, even field
<b>Slope Trigger</b>	Positive, Negative
<b>Alternative Trigger</b>	CH1 Trigger Type: Edge, Pulse, Video, Slope:
	CH2 Trigger Type: Edge, Pulse, Video, Slope

### Control Panel Function

<b>Auto Set</b>	Auto adjusting the Vertical system, Horizontal system and Trigger Position
<b>Save/Recall</b>	2 groups of referenced waveforms, 20 groups of setups, 10 groups of captured waveforms internal save/recall function and USB flash driver storage function.

### Display System

<b>Display Mode</b>	5.7 inch TFT colour LCD
<b>Resolution</b>	320 horizontal by 234 vertical pixels
<b>Display Colour</b>	24 bits
<b>Display Contrast</b>	150:1
<b>Backlight Intensity</b>	300nit
<b>Waveform Display Range</b>	8 x 12 div
<b>Waveform Display Mode</b>	Point, Vector
<b>Persistence</b>	Off, 1 sec, 2sec, 5sec, Infinite
<b>Screen-Saver</b>	Off, 1min, 2min, 5min, 10min, 15min, 30min, 1hour, 2hour, 5hour
<b>Waveform Interpolation</b>	Sin(x), x
<b>Colour model</b>	Normal , Invert
<b>Language</b>	English, Arabic, French, German, Russian, Spanish, Portuguese, Japanese

### Electrical Specifications

<b>Operating Supply Voltage</b>	100V-240V 50/60Hz
<b>Current Consumption</b>	4A
<b>Battery Type</b>	Rechargeable
<b>Battery Life</b>	5 Hours
<b>Safety Category Level and Voltage</b>	CAT II, CAT III

### Mechanical Specifications

<b>Dimensions</b>	259.5mm x 163.2mm x 53.3mm
<b>Length</b>	259.5mm
<b>Width</b>	163.2mm
<b>Height</b>	53.3mm
<b>Weight</b>	1.5Kg

### Operation Environment Specifications

<b>Altitude</b>	3000m
<b>Relative Humidity</b>	85%RH
<b>Operating Temperature Range</b>	0°C to 40°C
<b>Storage Temperature Range</b>	-20°C to 70°C

### Approvals

<b>Compliance/Certifications</b>	EN 61326-1:2006, CE
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### Additional Built-in Functionality

#### Multimeter

<b>Maximum Resolution</b>	6000 Counts
<b>Measure Function</b>	DCV, ACV, DCI, ACI, Resistance, Diode, Capacitance, Continuity
<b>Max Input Voltage</b>	AC(Vrms): 750V (AC frequency :20Hz~400Hz)DC :1000V
<b>Max Input Current</b>	AC (Vrms) : 10A (AC frequency :20Hz~400Hz)DC : 10
<b>Impedance</b>	10MΩ

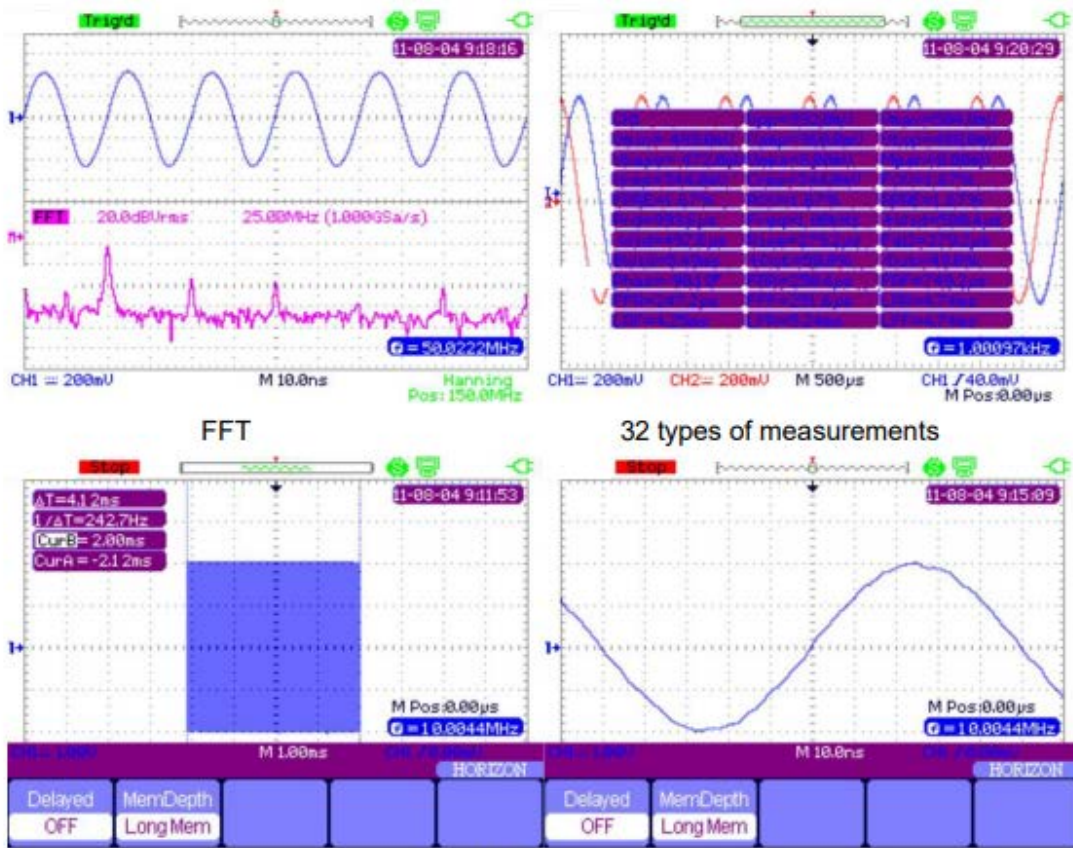
## Recorder

<b>Scope Trend Plot</b>	
<b>Record Size</b>	800K points, more than 18 hours
<b>Record Channel</b>	2 Channels
<b>Cursor, Zoom</b>	Support
<b>Manual Mode</b>	Support

<b>Meter Trend Plot</b>	
<b>Display</b>	All, Normal
<b>Record Size</b>	1.2M points
<b>Record Channel</b>	1 Channels
<b>Cursor, Zoom</b>	Support
<b>Manual Mode</b>	Support







Long Memory

## TrendPlot

- Scope TrendPlot records scope measurement data in scan mode, 800K points capacity, more than 24 hours recording time
- Meter TrendPlot records multimeter measurement data, 1.2M points recording depth, at 0.5GSa/s, recording time 8120 hours
- Recording results export available, convenient for further analysis
- Two kinds of display mode, 'ALL' and 'NORMAL'; support zoom and cursor
- Support recording real time

