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
- Supports Scope TrendPlot, Meter TrendPlot, Scope Recorder

RS PRO RSHS820 Oscilloscope, Handheld, 2 Channels, 200MHz

RS Stock No.: 123-6457

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

Series	RSHS1000
Model Number	RSHS820
Oscilloscope Type	Handheld
Bandwidth	200MHz
Low Frequency	≤10Hz
Sampling Type	Real Time, Equivalent
Sampling Mode	Sampling, Peak Detection, Average
Average Time	4, 16, 32. 64, 128, 256
Standard Interfaces	USB
Applications	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

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

Vertical System

Maximum Vertical Sensitivity	2mV/div
Minimum Vertical Sensitivity	100V/div
Vertical Resolution	8 bit
DC Gain Accuracy	5mv/div-100v/div:≤±3%
DC Measurement Accuracy (≤200mv/div)	±[3.0%*(| reading |+| offset |)+1% *|offset|+0.2div+2mV]
DC Measurement Accuracy (>200mv/div)	±[3.0%*(| reading |+| offset |)+1% * |offset|+0.2div+100mV]
Rise Time	≤1.7ns
Channel Voltage Offset Range	2mV-200mV: ±1.6V
Math Operation	+, -, * , /, FFT
FFT	Window Mode: Hanning, Hamming, Blackman, Rectangular Sampling: 1024 points

Horizontal System

Real Time Sampling Rate	500MSa/s
Interaction Mode	X, Sinx
Memory Depth	2Mpts, 1Mpts
Measure Display Mode	MAIN, WINDOW, WINDOW ZOOM, SCAN, X-Y
Time Base Range	2.5ns/div～50s/div
Horizontal Scan Rate	1ns/div to 500s/div

X-Y Mode

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

Measurement System

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

Trigger Specifications

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

Control Panel Function

Auto Set	Auto adjusting the Vertical system, Horizontal system and Trigger Position
Save/Recall	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

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

Electrical Specifications

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

Mechanical Specifications

Dimensions	259.5mm x 163.2mm x 53.3mm
Length	259.5mm
Width	163.2mm
Height	53.3mm
Weight	1.5Kg

Operation Environment Specifications

Altitude	3000m
Relative Humidity	85%RH
Operating Temperature Range	0℃ to 40℃
Storage Temperature Range	-20℃ to 70℃

Approvals

Compliance/Certifications	EN 61326-1:2006

Additional Built-in Functionality

Multimeter

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

Recorder

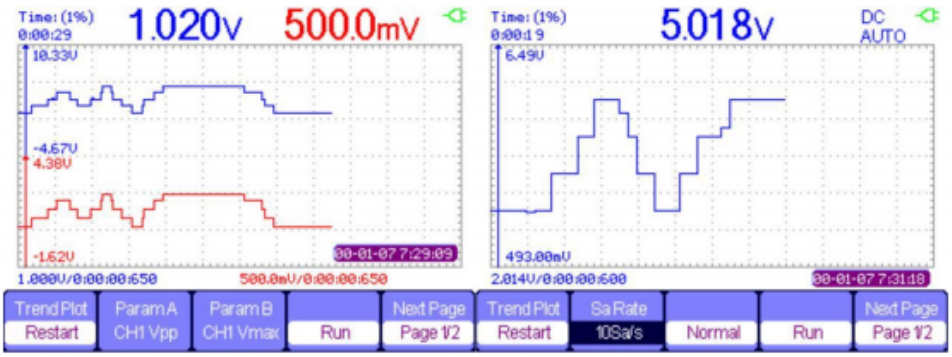
Scope Trend Plot	
Record Size	800K points, more than 18 hours
Record Channel	2 Channels
Cursor, Zoom	Support
Manual Mode	Support

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


Scope
Meter
Recorder
MENU
Run/Stop

TrendPlot

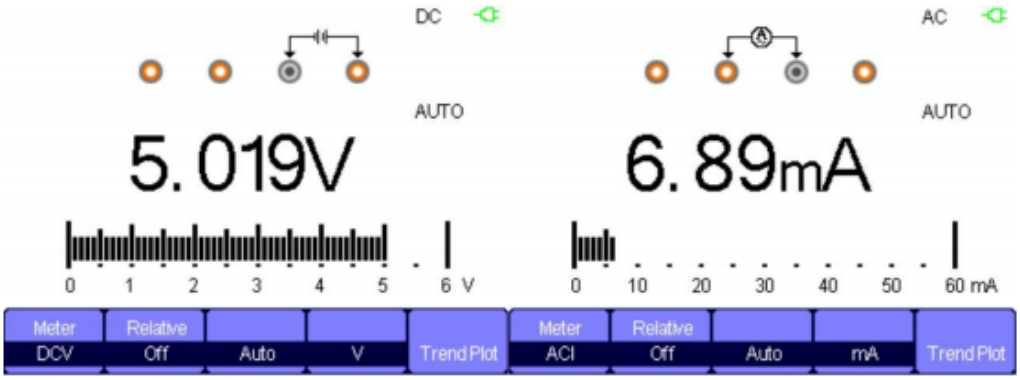
- Scope TrendPlot records scope measurement data in scan mode, 800K points capacity, more than 24 hours recording time
- Meter TrendPlot records multimeter measurement data, 1.2M points recording depth, at 0.5GSa/s, recording time 8120 hours
- Recording results export available, convenient for father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



Scope TrendPlot Meter TrendPlot

Multimeter

- 6000 counts high performance Multimeter
- Providing measurements of DCV, ACV, DCI, ACI, Resistance, Diode, Capacitance, Continuity



DCV measurement ACI measurement