

#### **FEATURES**

- 6 digit frequency counter
- Multi-language display
- Embedded online help
- Digital filter function
- Waveform recorder

# RS PRO RSDS1072CML+ Oscilloscope, Digital Storage, 2 Channels, 70MHz

RS Stock No.: 123-6436



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 RSDS1000CML+/DL+ Series is a dual-channel universal digital oscilloscope available in 50 MHz, 70 MHz, 100 MHz and 150 MHz bandwidth models.

#### Options available:

- 1236435 50MHz,2 channels
- 1236436 70MHz,2 channels
- 1236437 100MHz,2 channels
- 1236438 150MHz,2 channels

#### **General Specifications**

Series	RSDS1000CML+/DL+
Model Number	RSDS1072CML+
Oscilloscope Type	Digital Storage
Bandwidth	70MHz
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
Additional Interfaces	LAN, Pass/Fail out
Calibration Available	Yes
Applications	Educational laboratories, Electronics troubleshooting and measurement, Embedded electronics, Mixed-signal and video designing, Automotive electronics



### **Input System**

Input Coupling	AC, DC, GND
Input impedance	1MΩ ±2%. 18pf ±3pf
Probe attenuator	1X, 10X
Probe attenuator Factor Set	1X, 10X, 50X, 100X, 500X, 1000X
Maximum Input Voltage	400V
Input Sensitivity	2mV/div to 10V/div
Channel to Channel Isolation	>35dB
Single Channel Common Mode Rejection Ratio	> 100:1
Input Channel Connectors Type	BNC

# **Vertical System**

Maximum Vertical Sensitivity	2mV/div
Minimum Vertical Sensitivity	10V/div
Vertical Resolution	8 bit
DC Gain Accuracy	5mv/div-10v/div:≤±3% , ≤±4.0%: ≤2mV/div
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	≤3.5ns
Channel Voltage Offset Range	2mV-200mV: ±1.6V, 206mV ~ 10V: ± 40V
Math Operation	+, -, * , /, FFT
FFT	Hanning, Hamming, Blackman, Rectangular
Channel-to-channel skew	<500ps

### **Horizontal System**

Real Time Sampling Rate	1GSa/s
Interaction Mode	X, Sinx
Memory Depth	2Mpts
Measure Display Mode	Y-T, X-Y, Roll
Time Base Range	2.5ns/div~50s/div
Horizontal Scan Rate	100ms/div ~ 50s/div



### X-Y Mode

X-Pole Input / Y-Pole Input	Channel 1 (CH1), Channel 2 (CH2)
Sample Frequency	1GSa/s

### **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/EXT/(EXT/5)/AC Line
Trigger Modes	Auto, Normal, single
Trigger Coupling	AC, DC, LF Reject, HF Reject
Trigger Level Range	Internal: ±6 divisions / EXT: ±1.2V / EXT/5: ±6V
Trigger Displacement	Pre Trigger: Memory depth/(2*sampling) Delay Trigger: 260div
Trigger Sensitivity	For Fixed Range : 1DIV = DC – 10MHz EXT: ±(6% of setting 40Mv)
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: 2ns - 10s
Video Trigger	Support Signal Format: PAL/NTSC/SECAM Trigger Condition: odd field, even field, all lines, line num
Slope Trigger	Rising, Falling



### **Control Panel Function**

Alita Sot	Auto adjusting the Vertical system, Horizontal system and Trigger Position
Save/Recall	Setting, Waveform, Bmp, CSV 2 refs, 20 settings, 10waveforms, internal Save to USB disk

# **Display System**

Display Mode	5.7 inch TFT colour LCD
Resolution	800 × 480
Display Colour	24 bits
Display Contrast	500:1
Backlight Intensity	300nit
Waveform Display Range	8 x 16 div
Waveform Display Mode	Dots, Vector
Persistence	Off, 1sec, 2sec, 5sec, Infinite
Screen-Saver	Off, 1min, 2min, 5min, 10min, 15min, 30min, 1hour, 2hour, 5hour
Waveform Interpolation	Sin(x), x
Colour model	Normal , Invert
Language	English, Simplified Chinese, Traditional Chinese, Arabic, French, German, Russian, Portuguese Spanish, Japanese, Korean, Italian

### **Electrical Specifications**

Operating Supply Voltage	100Vrms to 240Vrms 50/60Hz
Safety Category Level and Voltage	CAT I 400V, CAT II 400V



#### **Mechanical Specifications**

Dimensions	323.1mm x 135.6mm x 157mm
Length	323.1mm
Width	135.6mm
Height	157mm
Weight	2.5kg

### **Operation Environment Specifications**

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

# Approvals

Compliance/Certifications	EN61340, CE









# Ordering information

Description	Model
50MHz, 2CH, 500MSa/s (Max.), 32Kpts, 7inch (800*480) LCD	RSDS1052DL+
70MHz, 2CH, 1GSa/s (Max.), 2Mpts, 7inch (800*480) LCD	RSDS1072CML+
100MHz, 2CH, 1GSa/s (Max.), 2Mpts, 7inch (800*480) LCD	RSDS1102CML+
150MHz, 2CH, 1GSa/s(Max.), 2Mpts, 7inch (800*480)LCD	RSDS1152CML+

### Standard Accessories

USB Cable -1

Quick Start -1

Certificate of Calibration -1

Passive Probe -2

Quality Certificate -1

Power Cord -1

CD (Included User Manual and EasyScopeX software) -1