

Active Voltage Rail ProbesRP2060/RP4060



Key Features

Up to 4 GHz Bandwidth ±60 V Offset Capability ±800 mV Dynamic Range 50 kΩ DC Input Impedance

1.2x Attenuation for low additive noise

MCX terminated cable with wide variety of connections:

- Solder-in (4 GHz)
- Coaxial Cable to
 U.FL receptacle (3 GHz)
- MCX PCB Mount (4 GHz)
- Browser (500 MHz)

ProBus Interface

The RP4060 and RP2060 probes are designed specifically to probe low-impedance DC power/voltage rails. Low attenuation means a low-noise view of small signal variations at high frequency, while the probe's built-in offset of up to ±60V enables compensation for the rail's DC voltage. The probe's high DC input impedance eliminates loading of the low-impedance DC rail.

Large Offset Range

Permits the DC signal to be displayed in the vertical center of the oscilloscope grid with a high-sensitivity gain setting.

Low Attenuation and Noise

The probe attenuation is a nominal 1.2x coupled to the oscilloscope at DC 50 Ω . This keeps additive noise to a minimum, and makes it exceptionally useful with Teledyne LeCroy's 12-bit High Definition oscilloscopes for lowest noise at highest sensitivity gain settings.

High DC Input Impedance

 $50~k\Omega$ input impedance at DC effectively eliminates probe loading on the DC power/voltage rail and provides for more accurate measurements and signal fidelity.

High Bandwidth

The RP4060 provides 4 GHz of bandwidth, for power integrity characterization of the highest performance computing and embedded systems. The RP2060 provides the same excellent noise and loading performance in a lower-cost 2 GHz probe.

Wide Assortment of Tips and Leads

The RP4060 and RP2060 are supplied standard with solder-in and coaxial cables with MCX and U.FL PCB receptacle mounts. Receptacles or leads can be left connected in circuit for easy connection of different signals. A browser tip is optionally available.

SPECIFICATIONS & ORDERING INFORMATION

Specifications	RP2060	RP4060	
Electrical Characteristics			
Bandwidth			
MCX receptacle	2 GHz	4 GHz	
Solder-in lead	2 GHz	4 GHz	
U.FL cable + receptacle	2 GHz	3 GHz	
Browser		500 MHz	
Rise Time (10-90%)	220 ps	110 ps	
Input Capacitance	0.1 uF (in ser		
DC Input Resistance	50 kΩ		
Offset Range	±60V		
Attenuation	1.2x		
Input Dynamic Range	±800 mV		
Non-destruct Voltage	±100 V (DC +Peak AC)		
Maximum Non-destruct AC Voltage	50 Ω oscilloscope input limit		
Maximum Safe Input Voltage	For Hand-held use: 60 V DC		
	(referenced to ground)		
	per IEC/EN 61010-031:201		
Noise (probe only) Oscilloscope Termination	110 uVrms	160 uVrms	
Environmental Operating Temperature Range	0 to 5	50 °C	
Non-operating Temperature Range	-40 to +70 °C		
Humidity	5% to 80% RH (non-condensing) up to 30 °C, decreasing linearly to 45% RH at 50 °C		
Trainialty			
Operating Altitude	3000 meters maximum		
Physical			
RP2060/RP4060	Probe:		
	38.1 mm W x 15.9mm H x 73mm L		
	$(1-1/2" \times 5/8" \times 2-7/8")$		
	SMA to MCX Cable: 914mm L (36") MCX to Solder-in Lead: 191mm (7-1/2") usable length MCX to U.FL Plug Coaxial Cable: 102mm (4") usable length		
RP4000-BROWSER		mm H x 38mm L	
THE TOOK DITOWOLIT	(15/32" x 3/8" x 1-1/2")		
	SMA to SMA Cable:		
	SIVIA (U SI	VIA Jubic.	

Ordering Information

Product Description

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	Power/Voltage Rail Probe 2 GHz, 1.2x, ±60V offset, ±800mV dynamic range	RP2060
	Power/Voltage Rail Probe 4 GHz, 1.2x, ±60V offset, ±800mV dynamic range	RP4060
Includes Qty. 1 ProBus compatible probe offset amplifier with 50 k Ω DC input impedance and SMA input connection for provided 0.9m SMA to MCX extension cable. Also supplied are Qty. 3 MCX solder-in leads, Qty 3 MCX PCB Mounts, Qty. 3 MCX to U.FL coaxial cables, Qty. 5 U.FL PC Mounts, Qty. 1 MCX to SMA adapter, and soft carrying case. Browser it		MA to ds, Qty. FL PCB

sold separately RP4000-BROWSER 500 MHz Browser Tip Accessory Includes 0 Ω (1x), 450 Ω (10x) and 950 Ω (20x) tips.



Accessories and Consumables

Qty. 3 MCX 4 GHz solder-in leads

RP4000-MCX-LEAD-SI

Product Code

Customer Service

Oscilloscope Interface

Software Requirements

Other

Weight

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

MAUI 10.1 or

higher

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



1-800-5-LeCroy teledynelecroy.com

1m (39-3/8") usable length

Teledyne LeCroy ProBus

119 g (0.26 lb)

MAUI 10.2 or

higher

Local sales offices are located throughout the world. Visit our website to find the most convenient location.