

Product Datasheet - Technical Specifications



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30 MHz High-Voltage Differential Probes PR65 Series



Features and benefits

- 30 MHz bandwidth
- Up to 700V (PR65) or 1400 V (PR67) differential (DC + AC Peak)
- 1000 V CAT III rated
- cTUVus certified
- Voltage over range indicator
- Switchable attenuation ratio
- Multiple power options – batteries, oscilloscope, or mains
- Insulated BNC interface
- Protective rubber case

Differential probes enable earth grounded oscilloscopes to make safe and accurate floating measurements between two voltage points. The PR65 Series differential probes convert floating signals to low-voltage ground-referenced signals that can be displayed safely on any ground-referenced oscilloscope.

The probes are compatible with B&K Precision's oscilloscopes, as well as other major manufacturers' (with 1 MΩ input impedance) and can be powered by batteries (included), a universal mains adapter (included), or by a USB equipped oscilloscope.

The PR65 Series is cTUVus certified to IEC 61010-031: 2015, for user safety and confidence.

Applications

- Precision power semiconductors
- Switch-mode power supply design
- Floating measurements
- Power converter measurements
- Precision motor drive measurements

Model	PR65	PR67
Attenuation	10x / 100x	20x / 200x
Max. Voltage (DC + AC Peak)	±70 V / ±700 V	±140 V / ±1400 V

Front



Specifications

Note: With the exception of rise time and gain accuracy, all specifications are typical and apply to the unit after a temperature stabilization time of 30 minutes over an ambient temperature range of 23 °C ± 5 °C.

Model	PR65	PR67
Performance Characteristics		
Bandwidth (-3 dB)	30 MHz	
Gain Accuracy	±2%	
Attenuation Ratio	10x / 100x	20x / 200x
Rise Time	14 ns	
Maximum Rated Input Voltage (each side to ground)	1000 V CAT III	
Maximum Differential Input Voltage (DC + AC Peak)	±70 V at 10x ±700 V at 100x	±140 V at 20x ±1400 V at 200x
Maximum Common Mode Input Voltage (DC + AC Peak)	±70 V at 10x ±700 V at 100x	±140 V at 20x ±1400 V at 200x
Input Impedance	5 MΩ, 2 pF (each side to ground)	
Output Voltage	±7 V (driving 1 MΩ load)	
Offset (typical)	±20 mV	
Noise (typical)	0.7 mVrms	
CMRR (typical)	50 Hz: -72 dB 20 kHz: -66 dB 200 kHz: -56 dB	
Power Requirements	4x AA batteries or USB-C cable	
Mains Adapter (North America Plugs)	Input: 100 to 240 V AC, 0.35 A Output: 5 VDC, 1 A	
Environmental and Safety		
Safety	cTUVus certified to IEC 61010-031: 2015	
Operating Temperature	14 °F to 104 °F (-10 °C to 40 °C)	
Storage Temperature	-22 °F to 158 °F (-30 °C to 70 °C)	
Humidity	≤ 80 % RH at 25 °C to 35 °C (77 °F to 95 °F)	
Altitude	Operating: 2000 m Non-operating: 15000 m	
Pollution Degree	P2	
General		
Included Accessories	Insulated sprung hook probes (1000 V CAT III, 20 A), protective rubber case, USB power cord (1 meter, USB- A to USB-C), power adapter (North America plug to USB-A female), and EU plug converter	
Input Leads Length	21.65" ± 1.18" (55 cm ± 3 cm)	
BNC Cable Length	37.4" ± 1.18" (95 cm ± 3 cm)	
Dimension (L x W x H)	8.66" x 2.67" x 1.10" (220 mm x 68 mm x 28 mm) (with protective rubber case)	
Weight	1.08 lbs (488 g) (with batteries and protective rubber case)	
USB Type C cable Length	39.37" ± 1.18" (100 cm ± 3 cm)	