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


4 mm sheathed banana plug connectors
Protective rubber case (removable)
Attenuation selection button
LED indicators
USB-C Input power port (on side)
Power button
Insulated BNC male output connector
1400 V Pk MAX
1000 V CAT III
1000 V CAT III
DIFFERENTIAL MODE
COMMON MODE
± 140 V @ 20X
± 1400 V @ 200X
± 1400 V
DC + PEAK AC
ATTENUATION RATIO
20X
200X
POWER ON
OVER RANGE
POWER
POWER OFF
Hold 5 sec
PR67
30 MHz Differential Probe
BK PRECISION
OUTPUT ≤ ± 7 V INTO 1 MΩ

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)	

About B&K Precision

For more than 70 years, B&K Precision has provided reliable and value-priced test and measurement instruments worldwide.

Our headquarters in Yorba Linda, California houses our administrative and executive functions as well as sales and marketing, design, service, and repair. Our European customers are most familiar with B&K through our French subsidiary, Sefram. Engineers in Asia know us through our B+K Precision Taiwan operation. The independent service centers in Singapore and Brasil service customers in Singapore, Malaysia, Vietnam, Indonesia and South America, respectively.

B&K Precision group member Independent service center Service center location

Quality Management System

B&K Precision Corporation is an ISO9001 registered company employing traceable quality management practices for all processes including product development, service, and calibration.

ISO9001:2015

Certification body NSF-ISR
Certificate number 6Z241-IS8

NSF-ISR
Registered to ISO 9001