

# PBDH0150 (701927)

## 150 MHz Bandwidth / High-Voltage Differential Probe

**Easily perform floating and differential voltage measurements in today's challenging power electronics and mechatronic applications**

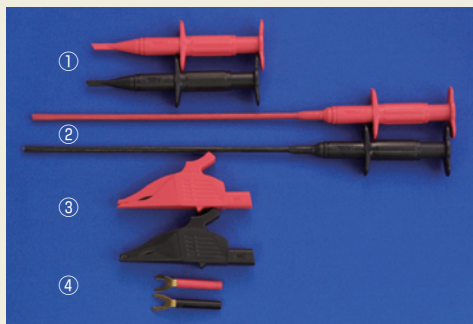


### Probe Tip Versatility:

Supports a wide variety of optional 4 mm safety adapters.<sup>(\*)3</sup>

- ① Standard Pincher Tips (included)
- ② 701906 Long Test Clips
- ③ 701954 Alligator Clips (Dolphin type)
- ④ 758921 Fork Terminal Adapters

And others.



1 m extension lead set (included)

<sup>(\*)3</sup> Bandwidth and Maximum Input Voltage specifications can be degraded when using adapters. Please refer to the instruction manual for detailed information.

### Features:

#### ■ Max. 1400 Vpeak, 150 MHz Bandwidth

- 1400 Vpeak capability is suitable for un-grounded and floating voltage measurements in power electronics and mechatronics applications including inverters, motor drives, and power supplies.
- Extended 150 MHz bandwidth supports most modern high-voltage applications.

#### ■ 1 meter Extension Lead Set

- 1 m long extension lead pair is included as a standard accessory.<sup>(\*)1</sup>
- Enables flexible probing in various situation such as environmental chamber measurements.
- Excellent bandwidth is maintained when using the extended lead set (100 MHz bandwidth, typical).
- Designed with consideration for ringing control.

#### ■ Compact Design

- Reduced size and weight over comparable probes (50% reduced volume over the Yokogawa 700924).
- Stackable design preserves valuable bench-top space in multi-channel applications.



#### ■ Automatic Attenuation Detection and Integral Probe Power Connector

- Switchable attenuation ratio (50:1 and 500:1) supports a wide range of voltage measurements.
- Oscilloscope attenuation ratio auto-detection is supported, reducing human error.<sup>(\*)2</sup>
- Integral probe power connector eliminates power cable tangles in multi-channel applications.

#### ■ Exchangeable Pincher Tips

- Standard pincher tips are exchangeable a wide variety of 4mm safety adapters (sold separately).

<sup>(\*)1</sup> Bandwidth specification is 100 MHz (-3 dB, Typical) when using the extension lead.

<sup>(\*)2</sup> Some models and firmware versions do not support attenuation auto-detection of the flip-switch after connecting probe.

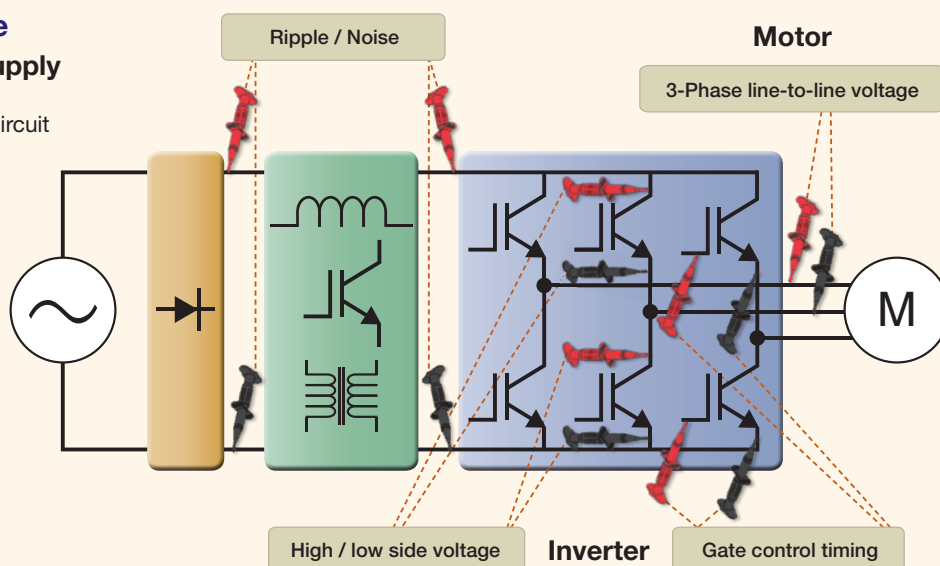
LF 701927-01EN

## Enables single-ended oscilloscopes to safely perform floating-voltage measurements

### ● Example

#### Power supply

PFC  
Switching circuit



#### Probe Model

Name	Model
PBDH0150 Differential Probe	701927

#### Standard contents

- Probe
- Pincher Tip
- Extension Lead (1 meter)
- 100 Ω Resistor Adapter (When not using extension lead)
- 150 Ω Resistor Adapter (When using extension lead)

#### Applicable models

- Yokogawa DL/DLM Series with Probe Interface including the following models: DLM2000, DLM4000, DL/DLM6000, DL9000, SB5000 series  
(Auto detection, power supply. Some restrictions depending on model.)

#### Specifications

- Bandwidth DC to 150 MHz (-3 dB)
- Bandwidth w/ Extension Lead DC to 100 MHz (-3 dB, Typical)
- Input Type Balanced Differential Input
- Attenuation Ratio 50:1, 500:1 - Switchable
- Input Resistance / Capacitance (Typical) 4 MΩ + 5 pF (to ground)
- Allowable Differential Voltage 500:1 ±1400 V (DC+ACpeak)  
50:1 ±140 V (DC+ACpeak)
- Allowable Common-Mode Voltage ±1400 V (DC+ACpeak) or 1000 Vrms
- Maximum Input voltage (to ground) ±1400 V (DC+ACpeak) or 1000 Vrms, CAT II
- CMRR (Typical) -80 dB @ 60 Hz, -50 dB @ 1 MHz
- Output Impedance Used on a 1 MΩ Input Oscilloscope
- Noise (Conversion to input, typical) 50 mVrms(50:1), 300 mVrms(500:1)
- DC Gain Accuracy ±2% (Common-Mode Voltage ≤ 400 V and ≥ -400 V)  
±3% (Common-Mode Voltage ≤ 1000 V and ≥ -1000 V)

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