## YOKOGAWA <

# 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 4mm safety adapters. (\*3)

- ① Standard Pincher Tips (included)
- ③ 701954 Alligator Clips (Dolphin type)
- 4 758921 Fork Terminal Adapters
  And others.





2 701906 Long Test Clips

1m extension lead set (included)

(\*3) 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. (\*1)
- 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 multichannel applications.

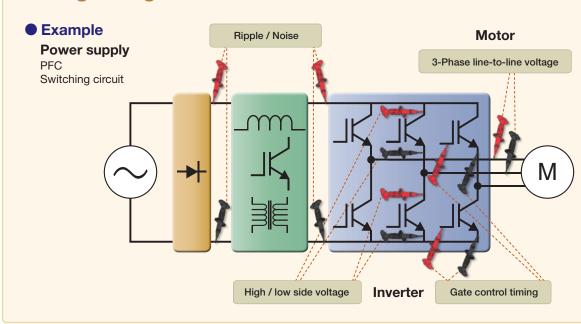
## Automatic Attenuation Detection and Integral Probe Power Connector

- 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. (\*2)
- 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).
- (\*1) Bandwidth specification is 100 MHz (-3dB, Typical) when using the extension lead.
- (\*2) Some models and firmware versions do not support attenuation autodetection of the flip-switch after connecting probe.

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



#### **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  $\Omega$  Resistor Adapter (When using extension lead)

#### Applicable models

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

#### **Specifications**

 Bandwidth DC to 150 MHz (-3dB) · Bandwidth w/ Extension Lead DC to 100 MHz (-3dB, Typical) • Input Type Balanced Differential Input Attenuation Ratio 50:1, 500:1 - Switchable

• Input Resistance / Capacitance (Typical)

4MΩ +5pF (to ground) Allowable Differential Voltage

500:1 ±1400V (DC+ACpeak) 50:1 ±140V (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

CMRR (Typical) -80dB @ 60Hz, -50dB @ 1MHz Output Impedance Used on a 1M\O Input Oscilloscope Output Noise 50mVrms(50:1), 300mVrms(500:1)

DC Gain Accuracy

 $\pm 2$  % (Common-Mode Voltage  $\leq 400$  V and  $\geq -400$  V) ±3 % (Common-Mode Voltage ≤ 1000 V and ≥ -1000 V)



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