

# 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. (\*3)

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





2 701906 Long Test Clips

1 m 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

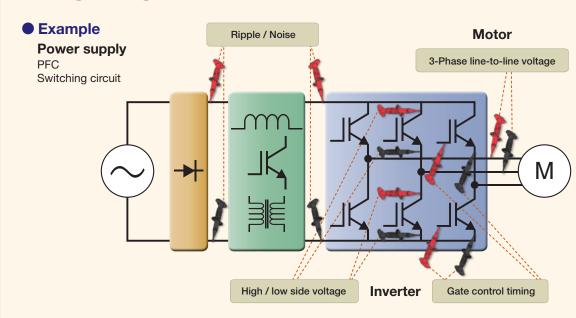
- Standard pincher tips are exchangeable a wide variety of 4mm safety adapters (sold separately).
- Bandwidth specification is 100 MHz (-3 dB, Typical) when using the extension lead.
- Some models and firmware versions do not support attenuation autodetection of the flip-switch after connecting probe.

LF 701927-01EN



## PBDH0150 (701927)

### **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 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,

(Auto detection, power supply. Some restrictions depending on model.)

#### **Specifications**

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

• Input Resistance / Capacitance (Typical)  $4 M\Omega + 5 pF$  (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 Used on a 1 M<sub>\Omega</sub> Input Oscilloscope Output Impedance

 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)



http://tmi.yokogawa.com/

YMI-KS-MI-SE05

[Ed: 02/b]

Subject to Change without notice.

Printed in Japan, 711(KP)

#### YOKOGAWA TEST & MEASUREMENT CORPORATION

Facsimile: +81-422-52-6462

YOKOGAWA CORPORATION OF AMERICA YOKOGAWA EUROPE B.V. YOKOGAWA SHANGHAI TRADING CO., LTD. YOKOGAWA ELECTRIC KOREA CO., LTD. YOKOGAWA ENGINEERING ASIA PTE. LTD.

YOKOGAWA ELECTRIC CIS LTD

YOKOGAWA INDIA LTD.

YOKOGAWA AMERICA DO SUL LTDA. YOKOGAWA MIDDLE EAST & AFRICA B.S.C(c) Phone: +973-17-358100

Phone: +31-88-4641000 Phone: +86-21-6239-6363 Phone: +82-2-2628-3810 Phone: +65-6241-9933

Phone: +91-80-4158-6396 E-mail: tmi@in.yokogawa.com Phone: +7-495-737-78-68 Phone: +55-11-5681-2400

E-mail: tmi@us.yokogawa.com E-mail: tmi@nl.yokogawa.com E-mail: tech@ysh.com.cn E-mail: TMI@kr.yokogawa.com E-mail: TMI@sg.yokogawa.com

E-mail: info@ru.yokogawa.com

Facsimile: +86-21-6880-4987 Facsimile: +82-2-2628-3899 Facsimile: +65-6241-9919 Facsimile: +91-80-2852-1442 Facsimile: +7-495-737-78-69

Copyright © 2012, Yokogawa Test & Measurement Corporation

E-mail: help.ymatmi@bh.yokogawa.com Facsimile: +973-17-336100