

**10:1 Passive Probe**  
(Wide operating temperature range)

**702902** for isolated BNC

**702906** for non-isolated BNC

**Precision  
Making**



**Best solution for accelerated testing and validation methods that include temperature cycling**

**Features:**

**Wider operating temperature range**

The operating temperature range of conventional passive probes is similar to that of the measurement instrument used (5 to 40°C). The 702902 and 702906 passive probes however have been designed to be used under a much wider operating temperature range (-40 to +85°C). These probes are therefore ideal for use in accelerated testing and validation methods where temperature cycling is part of the test procedure.

**Superior solidity and durability**

To withstand the usage under severe environmental conditions, these probes have been tested to withstand a cable mount pulling force of 60 N and have been tested over 500 temperature cycles (Sample test under our company standard).

**Long 2.5-meter probe length**

The probes are equipped with longer cables and as such the total length including the cable is 2.5 meter. This way it is easier to keep the measuring instrument away from the high temperature measurement point. Longer probe lengths are also required to connect a measuring instrument to a temperature controlled chamber.

**Support for isolated and non-isolated inputs**

The 702902 can be used in combination with the isolated input modules of the ScopeCorder series, whereas the 702906 has been designed to be used with the non-isolated inputs of the Yokogawa DLM4000 and DLM2000 Oscilloscopes.

**Probe tip conversion adapters (Sold separately)**

A range of probe tip conversion adapters is available to connect the probe to the application in the most convenient way such as: safety mini clips, fork terminal adapters and small or large alligator clips. Also 4 mm conversion adapters with pincher tip/safety banana connectors are available.



**702902 (for isolated BNC)**



**702906 (for non-isolated BNC)**



**SCOPECORDER**



**DLM4000**



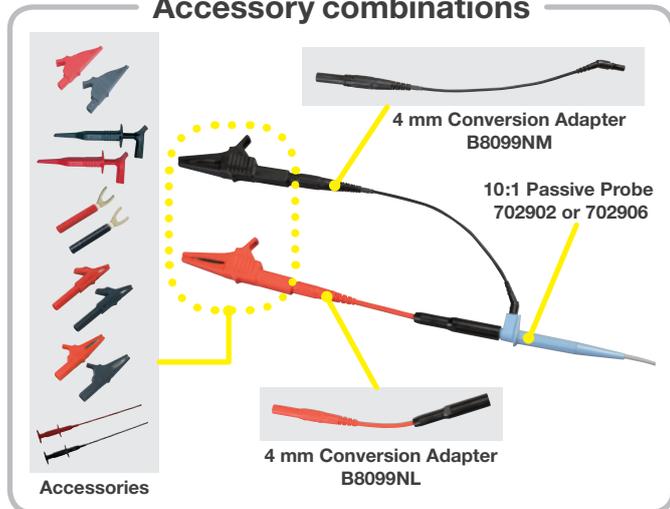
**DLM2000**

## Application

- Accelerated testing and validation of automotive parts and designs inside a temperature chamber.
- Environmental testing of power converters designed for outside installation such as inverters and transformers used for solar photo voltaic and wind turbine power generation.
- Evaluation and environmental testing of sensors and actuators used in automotive, railway, aerospace and marine applications.
- Testing of home appliances such as air-conditioners, cookers and refrigerators.



## Accessory combinations



## 701919 Probe Stand

A probe stand with a flexible arm and heavy base allows designers to guide probes onto the small geometries of fine-pitch interconnects, SMD packages MCMs (multi-chip-modules), hybrids and ICs.



## Specifications

Item	702902	702906
Supported Model	Isolated input module for ScopeCoder series	DLM2000 series, DLM4000 series
Frequency Band	DC to 60 MHz (-3 dB)	DC to 200 MHz (-3 dB)
Connector type	Isolated BNC	BNC
Input resistance/capacitance*1	10 MΩ±2%/17.0 pF*2	10 MΩ±2%/16.0 pF*2
Maximum input voltage	±1000 V (DC+ACpeak) CAT II Between the pincher tip and safety ground lead ±1000 V (DC+ACpeak) CAT II Between safety ground lead and ground	±1000 V (DC+ACpeak) CAT II Between the pincher tip and ground
Operating temperature range	-40 to +85°C	
Operating humidity range	< 80% (at 40°C) (No condensation)	
Probe Length	2.5 m	
Attenuation ratio*1	10:1 (Fix) ±2% (5 to 40°C) ±3% (-40 to 5°C, 40 to 85°C)	
Standard Parts	Pincher tip, Ground lead, Marker tip, User's manual (702906 only) Adjustment screwdriver	

\*1: In conjunction with a measuring instrument with an input impedance of 1 MΩ±1%.

\*2: Typical value

## Probe models

Name	Model
10:1 Passive Probe (Wide temperature operating range, for isolated BNC)	702902
10:1 Passive Probe (Wide temperature operating range, for non-isolated BNC)	702906

\*Due to the nature and usage of this product, no warranty period is provided.

## Accessories (-40 to +85°C)

Model	Name	Description	
B8099NL	4 mm Conversion Adapter (Pincher tip end)	1000 V (DC+ACpeak) CAT II	
B8099NM	4 mm Conversion Adapter (Ground lead end)	1000 V (DC+ACpeak) CAT II	
701954	Alligator Clip (Dolphin type)	1000 Vrms-CAT III, 1 set each of red and black	
701959	Safety Mini Clip (Hook type)	1000 Vrms-CAT II, 1 set each of red and black	
758921	Fork Terminal Adapter	1000 Vrms-CAT II, 1 set each of red and black	
758922	Small Alligator-Clip Adapter	300 Vrms-CAT II, 1 set each of red and black	
758929	Large Alligator-Clip Adapter	1000 Vrms-CAT II, 1 set each of red and black	
701906*	Long Test Clip	1000 Vrms-CAT II, 1 set each of red and black	

Due to the nature of this product, it is possible to touch its metal parts. Therefore, there is a risk of electric shock, so the product must be used with caution.

\*The operating temperature range of the 701906 is -40 to +65 °C.

# YOKOGAWA

**YOKOGAWA METERS & INSTRUMENTS CORPORATION**

Global Sales Dept. / Phone: +81-42-534-1413 Fax: +81-42-534-1426

Email: tm@cs.jp.yokogawa.com

tmi.yokogawa.com

**YOKOGAWA CORPORATION OF AMERICA**  
**YOKOGAWA EUROPE B.V.**  
**YOKOGAWA ENGINEERING ASIA PTE. LTD.**

Phone: (1)-770-253-7000

Phone: (31)-88-4641000

Phone: (65)-62419933

Fax: (1)-770-254-0928

Fax: (31)-88-4641111

Fax: (65)-62412606

Subject to change without notice.  
 ©2014, Yokogawa Meters & Instruments Corporation

(Ed:01/d) Printed in Japan, 411(KP)