## User's Manual

### 700987

# Isolation logic probe

The 700987 is a Isolation logic probe for DL716.

Make sure to comply with the following safety precautions. Not complying might result in injury or death.

#### **WARNING**

 Before using the logic probe, be sure to read the DL716's user's manual in addition to this one as it contains necessary precautionary information relevant to the probe's use.



### **CAUTION**

- Applying a voltage exceeding the voltage indicated below may cause damage to the logic probe or DL716. At a frequency above 1 kHz, damage may occur even when the voltage is lower than this voltage.
  - Maximum input voltage (at a frequency of 1 kHz or below) 250 Vrms (except ACpeak is 350 V or less, DC is 250 V or less)
- Each input terminal of the isolation logic probe is isolated from all other input terminals and the isolation logic probe is isolated from the DL716.
- Make sure to turn off DL716 before connecting or disconnecting the 26-pin connector from the logic input connector.
- Do not stack the isolation logic probes during use. Also, allow enough space around the probes to avoid a temperature increase inside the probes.

#### **Logic Input Connector**

Connect the logic probe to either of the logic probe input connectors (the two connectors indicated POD A and POD B).

#### About the Logic probe

Use the following leads to connect to the point of measurement.

- For measuring voltages of 42 V or less : Measurement lead, Model 366961
- For measuring voltages of 42 V or more : Measurement lead, Model 758917

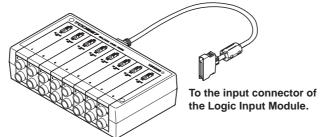
Do not alter the connecting leads. Doing so may cause the leads from satisfying the specification.

#### **Connecting the Logic Probe**

- **1.** Connect the measuring lead to the input terminal of the logic probe.
- **2.** Set the input switch. The threshold level is set to  $50 \text{ VAC} \pm 50\%$  (Hi : 80 to 250 VAC, Lo : 0 to 20 VAC) and  $6 \text{ V} \pm 50\%$  (Hi : 10 to 250 VDC, Lo : 0 to 30 VDC) when set to "AC" and "DC," respectively.

#### Connecting the logic probe to the Logic Input Module

- 3. Turn OFF DL716.
- **4.** Connect the end with the 26-pin connector (clamp filter with ferrite core, parts No. A1190MN) of the logic probe to the input connector of the Logic Input Module.
- **5.** Turn ON DL716.



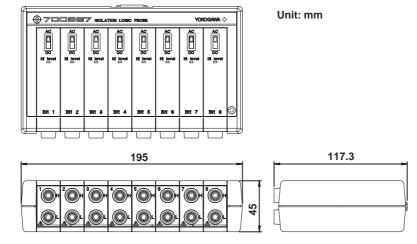


### **Specifications**

Item	Specifications				
Number of input points	8				
Input format	Isolated (all bits are isolated)				
Input connector	Safety terminal type (for banana plug) × 8				
Input switching	Can switch between AC/DC input for each bit				
Input signal display	Can confirm H/L with the LED for each bit (lights when H)				
Applicable input range	During DC input: H/L detection of 10 VDC to 250 VDC During AC input: H/L detection of AC type of 80 VAC to 250 VAC 50/60 Hz				
Threshold level	During DC input: 6 V ± 50% (Hi level: 10 to 250 VDC, Lo level: 0 to 3 VDC)  During AC input: 50 VAC ± 50% (Hi level: 80 to 250 VDC, Lo level: 0 to 20 VAC)				
Response time	During DC input: within 1 ms During AC input: within 20 ms				
Input impedance	approx. 100 kΩ				
Maximum input voltage (across H and L of each bit)	250 Vrms* <sup>1</sup> (CAT I and II)				
Maximum allowable common mode voltage (across input terminal H or	,	I)			
Maximum allowable voltage between bits	250 Vrms* <sup>1</sup> (CAT I and II)				
Withstand voltage (across input terminal and earth)	2000 VAC for 1 minute				
Isolation resistance (across input terminal and earth)	500 VDC, $10 \text{ M}\Omega$ or more				
Fuse*2					
	location	max. rated voltage	max. rated current	type	standard
	H side of input terminal	250 V	50 mA	time lag	VDE/SEMKO

<sup>\*1</sup> Make sure the ACpeak voltage does not exceed 350 V and the DC voltage does not exceed 250 V when the frequency is 1 kHz or less.

#### **External Dimensions**



The dimensional tolerance is  $\pm 3\%$  unless otherwise specified. (However, the tolerance of dimensions less than 10 mm is  $\pm 0.3$  mm.)

<sup>\*2</sup> Because the fuses used by this instrument are all inside the case, they cannot be exchanged by the user. If you believe the fuse inside the case is blown, please contact your nearest YOKOGAWA dealer listed on the back cover of this manual.