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

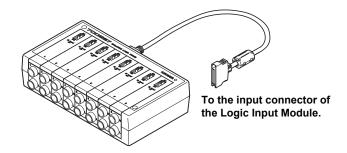
Do not alter the connecting leads. Doing so may cause the leads from satisfying the specification.

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 VAC \pm 50% (Hi: 80 to 250 VAC, Lo: 0 to 20 VAC) and 6 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.



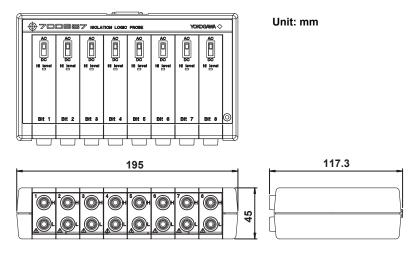


Specifications

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: $6 V \pm 50\%$ (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	250 Vrms ¹ (CAT I and II)
(across H and L of each bit)	
Maximum allowable common	250 Vrms ¹ (CAT I and II)
mode voltage (across input	
terminal H or L and earth)	
Maximum allowable voltage	250 Vrms ¹ (CAT I and II)
between bits	
Withstand voltage	2000 VAC for 1 minute
(across input terminal and earth)	
Isolation resistance	500 VDC, 10 M Ω or more
(across input terminal and earth)	
Fuse ²	Location Max. rated voltage Max. rated current Type Standard
	H side of input 250 V 50 mA Time lag VDE/SEMKO terminal

- 1 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.
- 2 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.

External Dimensions



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

2/2 IM 700987-01E