

LT

LT10A SERIES (for DT12/32)

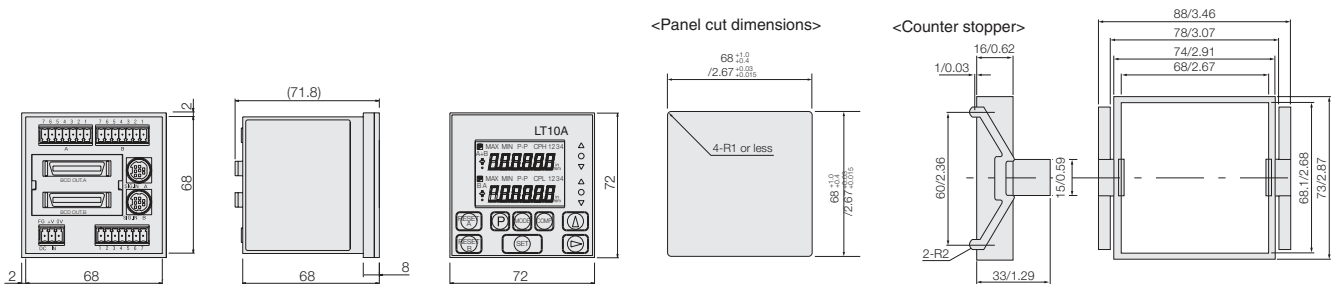
Compact, lightweight,
and easy-to-mount counter.



Counter unit

- Compact size : DIN standard (72 mm x 72 mm / 2.83" x 2.83" W x H)
- Resolution : 5,10 μm Selectable
- Suitable for panel mounting
- Direct interfacing from display unit to PLC or computer
- Current values, maximum, minimum, peak-to-peak values and GO/NO GO evaluation included as standard functions.
- ADD/SUB function (2-channel model)
- Full lineup for various applications

Dimensions



Unit : mm/inch

Common Specifications

Model	LT10A-105	LT10A-105B	LT10A-105C	LT10A-205	LT10A-205B	LT10A-205C
Display	5 digit backlit LCD, mode display					
I/O	Measuring unit input	1 channel			2 channel	
	I/O connectors *1	○			○	
	BCD *2	—	○	—	○	—
	RS-232C *3	—	○	○	—	○
RS-TRG *4	—	—	○	—	—	○
Reset function	Reset key or external input (I/O connectors)					
	—	BCD terminal	RS-232C command	—	BCD terminal	RS-232C command
Preset function	Preset value set with preset key, recalled with reset key.					
	—	Recalled with BCD reset terminal	Set or recalled with RS-232C command	—	Recalled with BCD reset terminal	Set or recalled with RS-232C command
Comparator function	Three-level comparator Comparator value set with keys on the front panel. Result evaluation: LED and I/O connector output (photocoupler)					
	—	Up to 4 values can be set for comparator (key input). Switched with BCD terminal.	Set with RS-232C command	—	Up to 4 values can be set for comparator (key input). Switched with BCD terminal.	Set with RS-232C command
Peak hold function	Maximum, minimum, and peak-to-peak values. Measuring started by the start input of the I/O connector; update stop by pause input.					
	—	Can be started with the BCD terminal.	RS-232C can set or start.	—	Can be started with the BCD terminal.	RS-232C can set or start.
Resolution	0.005 mm, 0.01 mm selectable					
Direction	Can be switched					
Maximum response speed	100 m/min			80 m/min		
Addition and subtraction function	—					
	A+B, A-B, B-A can be set with the direction setting.					
Alarm	Displayed on LCD or the I/O connector's comparator outputs are all "H" (OFF).					
	—	BCD alarm terminal "H" (OFF)	—	—	BCD alarm terminal "H" (OFF)	—
Data storage	Resolution, direction, comparator value, preset value, modes, etc.					
	—	BCD sign	Data signalling rate, etc.	—	BCD sign	Data signalling rate, etc.
Temperature	Operating temperature: 0 to 40°C Storage temperature: -10 to 50°C					
Power consumption *5	1.8 W	2.9 W	2.0 W	2.3 W	4.0 W	2.5 W
Mass	Approx. 200 g	Approx. 230 g	Approx. 220 g	Approx. 210 g	Approx. 270 g	Approx. 230 g
Power voltage	Power input connector (3 pins) : DC9.0 to 26.4 V.					
Compatible measuring unit	DT12/32 series					

Note 1 : I/O connector

Input : Reset, peak-hold start, peak-hold pause, RS trigger (RS-232C models only)

Output : Result evaluation (photocoupler)

Note 3 : RS-232C (8 pin mini-DIN connector)

Reset, preset value setting/recall, peak-hold start, peak-hold pause, current value hold, software version read, comparator value setting, current value/maximum value/minimum value/peak-to-peak measuring mode selection and output, key lock and release.

Note 2 : BCD (36 pin half-pitch connector)

Input : Reset, peak-hold start, comparator value selection (4 settings)

Output : five digits (open collector) One of current value/maximum value/minimum value/peak-to-peak value selected and output.

Alarm output

Note 4 : RS-TRG pin

Trigger input for RS-232C data output

Note 5 : With measuring unit connected.

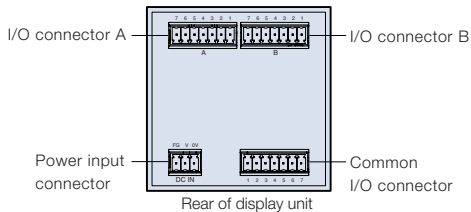
Technical information

LT Series Usage Note

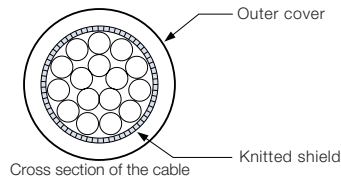
I/O connector

The I/O connector on the rear panel of the counter unit has functions for Go/No Go output based on the comparator function, start input, pause input, RS-232C trigger input and reset input.

Connector pin assignment (LT30, LT20A, LT11A, LT10A)



Use a shielded cable for connection to the FG pin on the rear of the display unit. (Prepare a shield cable by yourself.)



Connector used: MC1.5/7-ST-3.5 (provided) made by Phoenix Contact

Signal
(See "4-3. Function description".)
I/O connector A

Pin No.	Signal name	IN/OUT	Signal
1	GND	-	
2	NC	-	Connection prohibited
3	RESET (A)	IN	Reset input (A CH)AB
4	LO (A)	OUT	Go/No Go output Low (A CH)
5	GO (A)	OUT	Go/No Go output Go (A CH)
6	HI (A)	OUT	Go/No Go output High (A CH)
7	GND	-	

I/O connector B (not provided for 1-channel models)

Pin No.	Signal name	IN/OUT	Signal
1	GND	-	
2	NC	-	Connection prohibited
3	RESET (B)	IN	Reset input (A CH)AB
4	LO (B)	OUT	Go/No Go output Low (B CH)
5	GO (B)	OUT	Go/No Go output Go (B CH)
6	HI (B)	OUT	Go/No Go output High (B CH)
7	GND	-	

Installing the display unit

When mounting in a panel

1. Cut out an opening to match the dimensions shown (Fig.2)
2. Insert the display unit into the cut-out opening in the panel from the front.
3. Attach the supplied installation brackets (upper / lower) from the rear.
4. Use fingers to tighten and secure.

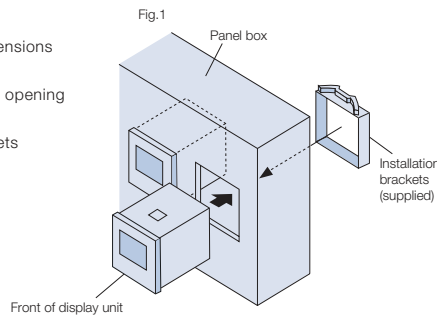


Fig.2 Cut-out dimensions

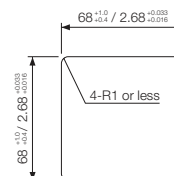
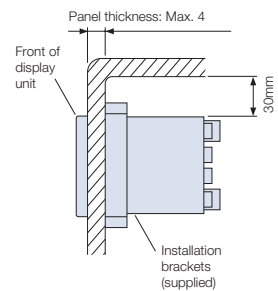


Fig.3



Note: When attaching the installation brackets to the display unit, leave enough space (min. 30mm) between it and the panel.

Unit : mm/inch