

Display für DT12 / DT 32 Messtaster



LT10A SERIES (for DT12/32)

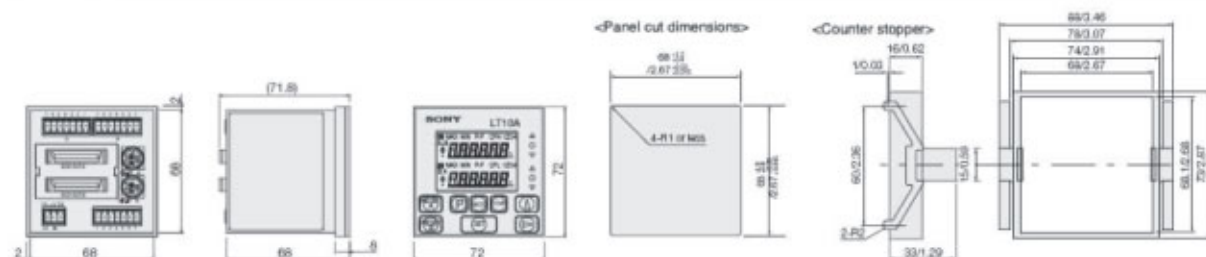
Compact, lightweight,
and easy-to-mount counter.



Counter unit

- Compact size : DIN standard (72 mm x 72 mm / 2.83" x 2.83" W x H)
- Resolution : 5,10 m 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	105B	105C	205	205B	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	0.001 mm, 0.005 mm, 0.01 mm selectable (0.0001" is LT11A series only.)					
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	CF12/32 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 2 : RS-232C (3 pin mini-DIN connector)

Reset, preset value setting/local, 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 3 : BCD (36 pin half-pitch connector)

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

Output : five digits (per 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.

Display für DT512 Messtaster



LT11A SERIES (for DT512)

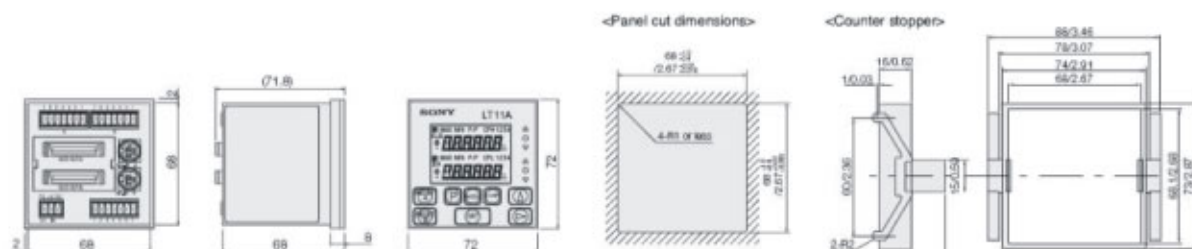
Compact, lightweight,
and easy-to-mount counter.



Counter unit

- Compact size : DIN standard (72 mm x 72mm / 2.83" x 2.83" W x H)
- Resolution: 1, 5, 10 m 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



Common Specifications

Model	LT11A-101	101B	101C	201	201B	201C
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	0.001 mm, 0.005 mm, 0.01 mm selectable (0.001 mm (0.0001") is LT11A series only.)					
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	2.9 W	4.0 W	2.5 W
Mass	Approx. 200 g	Approx. 210 g	Approx. 220 g	Approx. 210 g	Approx. 270 g	Approx. 230 g
Power voltage	Power input connector (5 pins) : DC0.0 to 25.4 V.					
Compatible measuring unit	DT512 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 2 : RS-232C (5 pin mini-DIN connector)

Reset, preset value setting/local, 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 3 : BCD (35 pin half-pitch connector)

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

Output : five digits (pne 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.

Display für DG Messtaster

LT20A SERIES (for DG, DL)

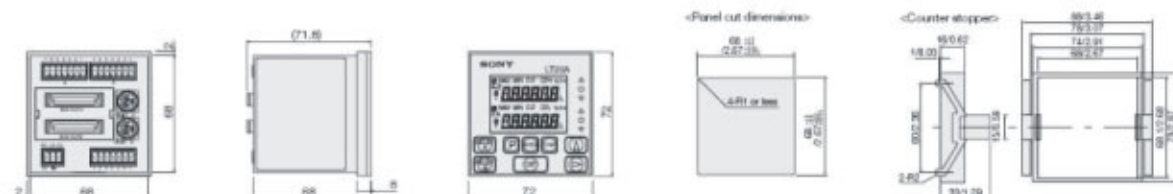
Compact, lightweight,
and easy-to-mount counter

- Compact design : DIN standard size (72 mm x 72 mm / 2.83" x 2.83" W x H).
- Suitable for panel mounting
- Selectable display resolutions: 0.5/ 1/ 5/ 10 μ m
- BCD and RS-232C I/O models are available.
- Reset/preset
- Peak hold function for measuring max./ min./ peak-to-peak values and GO/NO GO evaluation.
- ADD/ SUB function (2-axis model only)
- Data storage : resolution, counting direction, comparator reference points, preset value, mode, BCD sign (B type), communication parameters (C type)
- Inch/ metric display
- Applications: automatic sorting and measuring of parts on production lines.



Counter unit

Dimensions



Unit : mm/inch

Common Specifications

Model	LT20A-101	101B	101C	201	201B	201C
Display	6 digit backlit LCD, mode display					
I/O	1 channel			2 channel		
				○		
	—	○	—	—	○	—
	—	—	○	—	—	○
	—	—	○	—	—	○
Reset function	Reset key or external input (I/O connectors)					
	—	—	RS-232C command	—	—	RS-232C command
Preset function	Preset value set with preset key, recalled with reset key.					
	—	—	Set or recalled with RS-232C command	—	—	Set or recalled with RS-232C command
Comparator function	Three-level 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.					
	—	—	RS-232C can set or start.	—	—	RS-232C can set or start.
Input resolution	0.0005 mm, 0.001 mm, 0.005 mm, 0.01 mm selectable					
Display resolution	0.0005 mm, 0.001 mm, 0.005 mm, 0.01 mm (0.00002", 0.00005", 0.0001", 0.0002") selectable					
Direction	Can be switched					
Reference point function	Function use enabled/disabled can be selected (if use is enabled, the unit enters reference point signal input wait status at the same time as power-on).					
Maximum response speed	20 MHz (A/B phase difference)					
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 signaling rate, etc.	—	BCD sign	Data signaling rate, etc.
Temperature	Operating temperature: 0 to 40°C Storage temperature: -10 to 50°C					
Power consumption *5	4 W	5 W	4 W	6 W	8 W	6 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 (5 pins) : DC9.0 to 26.4 V.					
Compatible measuring unit	DG, DL 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 2 : 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 3 : BCD (25 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-TRIG pin

Trigger input for RS-232C data output

Note 5 : With measuring unit connected.

Display für DK Messtaster



LT30 SERIES (for DK series)

Counter compatible with our compact, high-precision DK series of digital gauges.

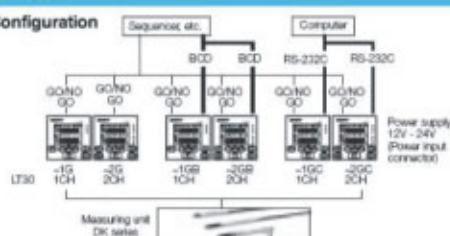
- Minimum display resolution : 0.1 mm
- Zero point detection
- BCD and RS-232C I/O models are available.
- Compact and lightweight: DIN standardsize (W 72mm x H 72mm)
- Comparator ● Reset/Preset
- Alarm for exceeded max. response speed and disconnected measuring unit
- Setting value storage
- 2-axis ADD/SUB (2-axis model only)



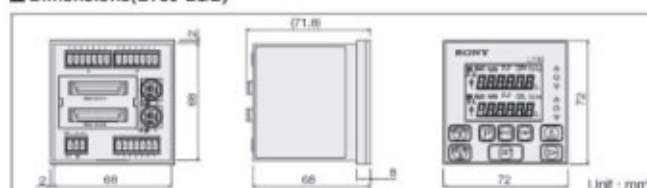
Counter unit

System structure

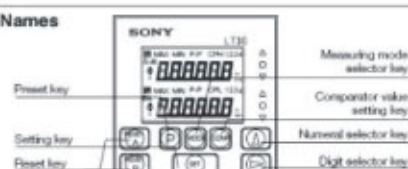
System Configuration



Dimensions (LT30-2GB)



Part Names



Input/output Pins

- I/O connector
Inputs : Reset, Peak hold start, Peak hold pause
Outputs : GO/NO GO ● Power input connector : 12 to 24V DC power
- BCD (6-pin half-pitch connector)
Inputs : Comparator value selection (4 settings), Mode selection (Current value, Maximum measured value, Minimum measured value, P-P value) Outputs (Open collector) : Measured data (6 digits), Alarm output
- RS-232C (9-pin mini-DIN connector) Reset, Preset value setting/local, Peak hold start, Peak hold pause, Comparator value setting, Mode selection and output (Current value, Maximum measured value, Minimum measured value, P-P value)
- RS-TRG Trigger inputs for RS-232C data outputs

Separate accessories (Connectable to LT30-1GC/2GC)

- RS-232C cable D25B : D-sub 9-pin D25BA : D-sub 25-pin

Common Specifications

Model	LT30-1G	1GB	1GC	2G	2GB	2GC
Display	6 digit bi-color 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)					
	—	—	RS-232C command	—	—	RS-232C command
Preset function	Preset value set with preset key, recalled with reset key.					
	—	—	Set or recalled with RS-232C command	—	—	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.					
	—	—	RS-232C can set or start.	—	—	RS-232C can set or start.
Input resolution	0.0001 mm, 0.0005 mm, 0.001 mm, 0.005 mm, 0.01 mm selectable					
Display resolution	0.0001 mm, 0.0005 mm, 0.001 mm, 0.005 mm, 0.01 mm (0.00002", 0.00005", 0.0002", 0.0005") selectable					
Direction	Can be switched					
Reference point function	Function use enabled/disabled can be selected (if use is enabled, the unit enters reference point signal input wait status at the same time as power-on).					
Maximum response speed	20 MHz (A-B phase difference)					
Addition and subtraction function	Speed over or measuring unit cable disconnected (Displayed on LCD or the I/O connector's comparator outputs are all "H" (OFF).)					
Alarm	—	BCD alarm terminal "H" (OFF)	—	—	BCD alarm terminal "H" (OFF)	—
Data storage	Resolution, direction, comparator value, preset value, modes, etc.					
	—	BCD sign, etc.	Data signaling rate, etc.	—	BCD sign, etc.	Data signaling rate, etc.
Temperature	Operating temperature: 0 to 40°C Storage temperature: -10 to 50°C					
Power consumption *5	5 W	5.5 W	5 W	8.5 W	9 W	8.5 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	DK 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 2 : RS-232C (5 pin mini-DIN connector)

Note 3 : RS-232C (5 pin mini-DIN connector)
Reset, preset value setting/local, 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 4 : BCD (6 pin half-pitch connector)

Note 5 : BCD (6 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 6 : RS-TRG pin
Trigger input for RS-232C data output

Note 7 : With measuring unit connected.