

LT

LT30 SERIES (for DK series)

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

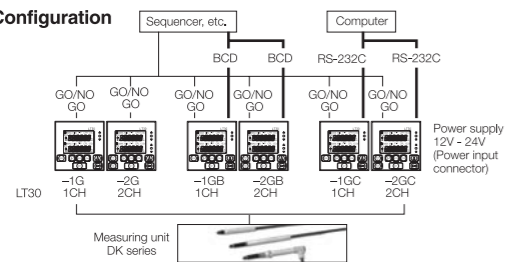


Counter unit

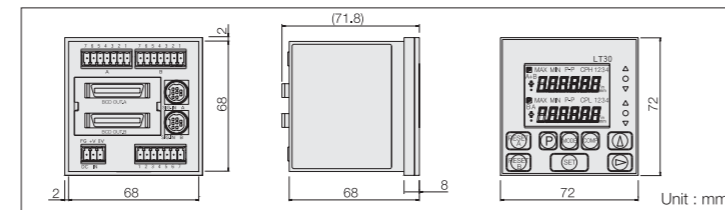
- Maxmum display resolution : 0.1μm
- Zero point detection
- BCD and RS-232C I/O models are available.
- Compact and lightweight: DIN standardsize (W 72mm x H 72mm)
- Comparator ● Reset/Preset
- Alarm for exceeded max. response speed and disconnected measuring unit
- Setting value storage
- 2-axis ADD/SUB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

System structure

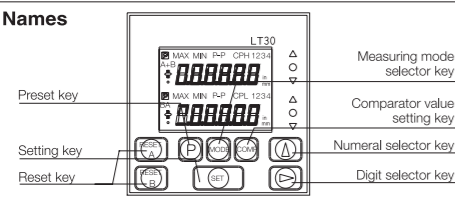
System Configuration



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 (36-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 (8-pin mini-DIN connector) Reset, Preset value setting/recall, 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 DZ252 : D-sub 9-pin DZ253A : D-sub 25-pin

Common Specifications

Model	LT30-1G	1GB	1GC	2G	2GB	2GC
Display	6 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)					
Preset function	Preset value set with preset key, recalled with reset key.					
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.					
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	A+B, A-B, B-A can be set with the direction setting.					
Alarm	Speed over or measuring unit cable disconnected (Displayed on LCD or the I/O connector's comparator outputs are all "H" (OFF)).					
Data storage	Resolution, direction, comparator value, preset value, modes, etc.					
	—	BCD sign, etc	Data signalling rate, etc.	—	BCD sign, etc	Data signalling 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 : 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.
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 4 : RS-TRG pin
Trigger input for RS-232C data output
Note 5 : With measuring unit connected.

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LT20A SERIES (for DG, DL)

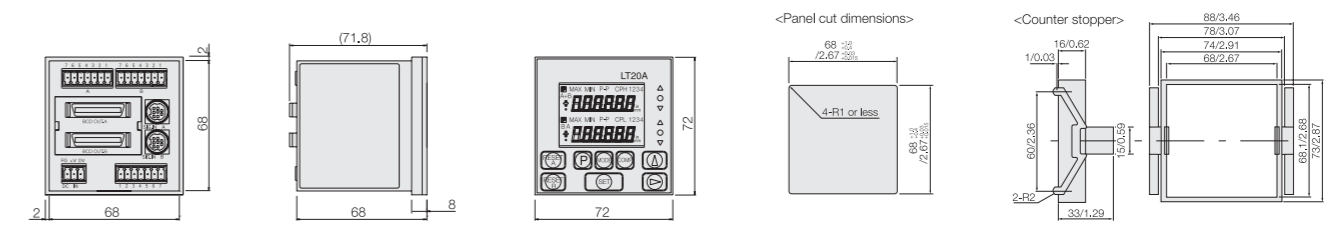
Compact, lightweight, and easy-to-mount counter



Counter unit

- 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 μm
- 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.

Dimensions



Unit : mm/inch

Common Specifications

Model	LT20A-101	101B	101C	201	201B	201C
Display	6 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)					
Preset function	Preset value set with preset key, recalled with reset key.					
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.					
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", 0.0002", 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	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).					
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	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 (3 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 : 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.
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 4 : RS-TRG pin
Trigger input for RS-232C data output
Note 5 : With measuring unit connected.