LT

LT30 SERIES (for DK series)

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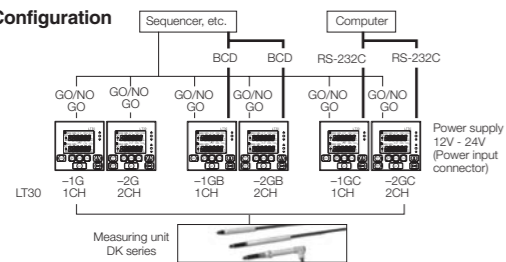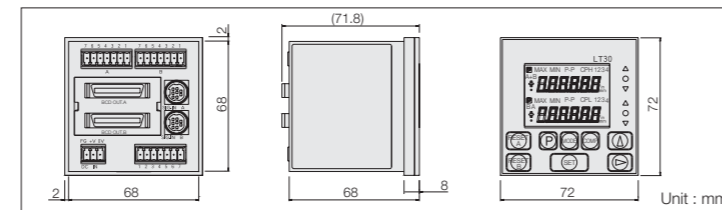
- ● Maxmum display resolution : 0.1μm
- ● Zero point detection
- ● BCD and RS-232C I/O models are available.
- ● Compact and lightweight: DIN standardsize (W 72mm x H 72mm)
- ● Comparator ● Reset/Preset
- ● Alarm for exceeded max. response speed and disconnected measuring unit
- ● Setting value storage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

Counter unit
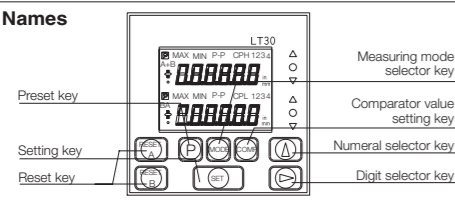
System structure

■System Configuration

■Part Names

- Measuring mode selector key
- Comparator value setting key
- Numeral selector key
- Digit selector key
- Preset key
- Setting key
- Reset key

■Dimensions(LT30-2GB)

Unit : mm

■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)					
		—	—	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
Conparetor 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		—			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).)					
		—	BCD alarm terminal "H" (OFF)	—	—	BCD alarm terminal "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. 210 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 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 measuringmode 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-peakvalue selected and output.
    Alarm output
Note 4 : RS-TRG pin
    Trigger input for RS-232C data output
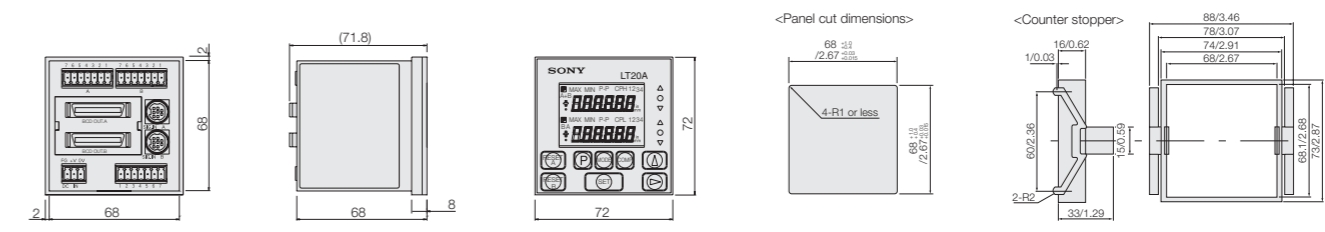Note 5 : With measuring unit connected.

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LT

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 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.

Counter unit

Dimensions

<Panel cut dimensions>

4-R1 or less

<Counter stopper>

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)					
		—	—	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
Conparetor 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		0.0005 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).					
		—	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		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 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 measuringmode 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-peakvalue selected and output.
    Alarm output
Note 4 : RS-TRG pin
    Trigger input for RS-232C data output
Note 5 : With measuring unit connected.

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