

# LY

# LY71

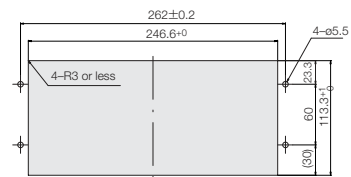
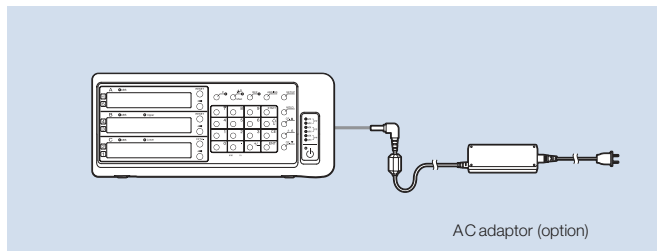
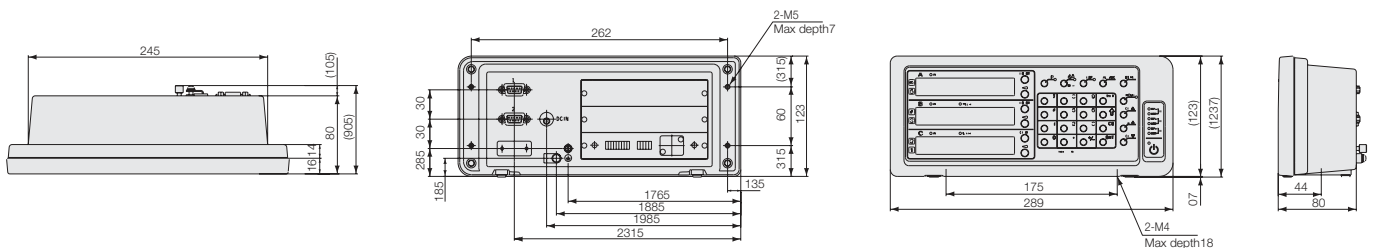
For measurements and control in diverse field uses.  
The required output board can be extended.

- Various outputs are enabled by mounting extension boards
  - BCD Output (Option)
  - Comparator Function: Relay / Open-collector (Option)
- Peak Hold Function Convenient for Statistical Measurement
- Convenient External Input Functions for Automatic Measurement
- Display Resolution Switching ● Data Storage.
- Reset/Preset/Restart ● Detecting Reference Point of Measurement Unit
- Scaling ● Flicker Control



Counter unit

## Dimensions



Mounting the counter unit from the panel front.

Unit : mm/inch

\*Please refer to p54 for the details of the screw.

## Specifications

Model	LY71
Display	7 digits and minus display, Color amber
Number of input shafts	1 or 2 axes (2-axis add function available; addition only is displayed when adding)
Display data	Current (1st axis, 2nd axis, addition axis), maximum, minimum and peak-to-peak values
Measuring unit input resolution	Standard : 0.1 $\mu\text{m}$ , 0.5 $\mu\text{m}$ , 1 $\mu\text{m}$ , 5 $\mu\text{m}$ , 10 $\mu\text{m}$ , 1 s, 10 s, 1 min, 10 min Expanded : 100 $\mu\text{m}$ , 50 $\mu\text{m}$ , 25 $\mu\text{m}$ , 20 $\mu\text{m}$ , 2 $\mu\text{m}$ , 0.05 $\mu\text{m}$ , and 1 degree can be added.
Input signal	A/B quadrature signal, Z signal (Conforms to EIA-422)
Display resolution	Measuring unit input resolution or higher and supported inch units Inch: Basic : 0.000005", 0.00001", 0.00005", 0.0002", 0.0005" Inch: Expanded: 0.00002", 0.0001", 0.001", 0.001", 0.002", 0.005"
Minimum input phase difference	100 ns
Alarm display	Measuring unit disconnected, Excess speed, Maximum display amount exceeded, Power failure, Error in stored data
Reset	Current value reset, Alarm cancel
Restart	Restart of peak value calculation for each axis/all axes
Preset	It is possible to store/edit up to three values for each axis.
Master calibration function	The master calibration value is relocated when going past the reference point after the power is turned on.
Datum point operations	It is possible to store/edit one value for each axis (when not using the master calibration function).
Reference point operations	It is possible to store/edit one value for each axis (when not using the master calibration function).
Hold function	Selectable from latch and pause Latch : Display held while latched (Display hold) Pause : Peak calculation stopped while paused (Peak calculation hold)
Linear compensation	A fixed compensation amount is applied to the measuring unit's count value. Compensation amount Standard: $\pm 600 \mu\text{m/m}$ (Expanded: $\pm 1000 \mu\text{m/m}$ )
Scaling	Scaling factor: 0.100000 to 9.999999
Power supply	DC 12 V Rating 0.75 A Max. 1 A AC 100 V to 240 V $\pm 10\%$ When using the AC adaptor PSC-22 (For U.S. only) or PSC-23 (For Europe and other countries) *Option
Power consumption	MAX. 32 VA connected at the AC adaptor.
Operating temperature	0 to 40 °C (no condensation)
Storage temperature	-20 to 60 °C (no condensation)
Mass	Approx. 1.5 kg

# Accessories

## LZ71 series Expansion boards (for LY71)

The functions of your LY71 counter unit can be expanded simply by inserting the expansion unit into the LY71.

### LZ71-B

- BCD output of various data
- Various output modes
- Open collector output

### LZ71-KR

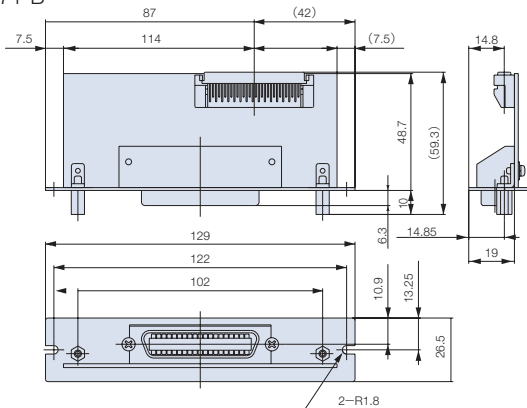
- Comparator function for various data
- Switching between 16 sets of data
- Open collector output/relay output



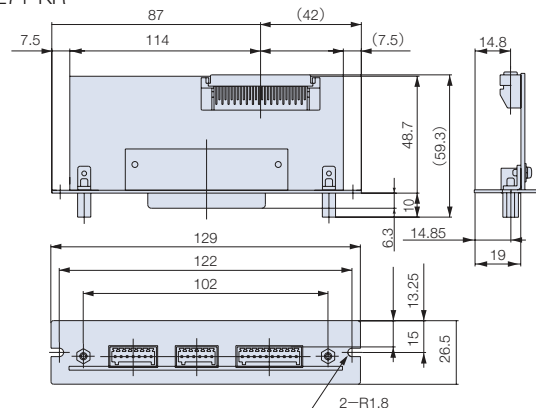
LZ71-B LZ71-KR

Specifications	
Model	LZ71-B
BCD output	7 digit parallel data (4 bits x 7 digits), sign (1 bit), READY signal (1 bit) Output logic positive and negative logic can be selected individually for the data and sign by the settings.
Electrical specifications	Photocoupler output VCE : Recommended DC +12 to 24 V IC : Max. 15 mA/terminal, TOTAL: 300 mA Output connector: 36-pin micro ribbon connector
Latch	Selectable from "BCD only latch" and "BCD & display latch" by the initial settings. Input signal : DRQ1 to 3 (Photocoupler: 12 to 24 V)
Operating temperature	0 to 40°C (32 to 104°F) (No condensation)
Storage temperature	-20 to 60°C (-4 to 140°F) (20 to 90 % RH, no condensation)
Model	LZ71-KR
Comparator function	Sets 1 to 4 comparator values for judging the data size.
Comparable data	Comparable data Current, maximum, minimum and peak-to-peak values. (Based on the settings) (1st axis, 2nd axis and addition axis)
Upper limit and lower limit combinations	Selectable from 16 data sets consisting of 1 to 4 comparator setting values.
Judgment outputs	5-point output signal Photocoupler (voltage resistance: 24 V), Ic = 15 mA 5-point output signal Relay : Panasonic Electric Works, Co., Ltd. ATQ209 24 V DC, 120 V AC, 0.3 A
External input	Photo coupler: supports 12 to 24 V
Positioning function (1 point) modes	Sets the positioning data and turns the output signal on for 0.5 s when the set value and the current value match.
Applicable data	Current value only (1st axis or addition axis)
Operating temperature	0 to 40°C (32 to 104°F) (No condensation)
Storage temperature	-20 to 60°C (-4 to 140°F)

### LZ71-B



### LZ71-KR



Unit : mm

## Other accessories

- Cable connectors for computer connection (for U Series/ LT Series/ LY Series) DZ252 (round 8 pin ↔ D sub 9 pin) (2 m) DZ253A (round 8 pin ↔ D sub 25 pin) (2 m) DZ254 (round 8 pin ↔ unterminated end)