## LY51

## Multifunction display with various replaceable expansion I/O boards

■ Compact design. Suitable for panel-mounting.
■ Selectable display resolution

- Five different replaceable I/O boards. Up to 3 boards can be installed at a time
- Comparator (Relay output type) • RS-232C
- Comparator (Open collector output type) • A/B phase output
- BCD (Open collector output) *Only one board of a kind can be installed in LY51.

Reset/preset/recall
■ Peak hold function for measuring max./min./peak-to-peak values.

- ADD/SUB function ■ Zero point detection
- Data latch ■ Data storage
- Linear error compensation
- Various controls and data analyses by PLCs and computers
- Inch/metric display


## Specifications

| Model |  | LY51 |
| :---: | :---: | :---: |
| No. of connectable axes |  | 2 |
| No. of display axes |  | 1 |
| Display | Main | 7 digits, LED display (leading zero suppress, floating minus sign) |
|  | Aux | Two 7 digits, green LED display (leading zero suppress, floating minus sign), 16 digits message display |
| Display resolution |  | Varies with the transducer ( $0.1 \mu \mathrm{~m}$ with DE-B gauge) |
| Max. response speed |  | Varies with the transducer |
| Reset/Preset/Recall |  | By key operations or external input |
| Peak hold function |  | Max./ min./ peak-to-peak values |
| ADD/SUB |  | A+B, A-B, B-A |
| Linear error compensation |  | When table moves a certain distance, a unit of compensation value is added or subtracted for linear compensation |
| Zero point detection |  | Used with a transducer having a zero point, LY51 detects the zero point |
| Data latch |  | Output latch and display latch |
| Data storage |  | Preset value and the value that was displayed before power-off are stored in non-volatile memory |
| Alarm display |  | 1. Power interrupt 2. Max.response speed exceeded <br> 3. Error in stored data 4. Transducer disconnected |
| Operating temperature |  | $0{ }^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C} / 32^{\circ} \mathrm{F}$ to $104{ }^{\circ} \mathrm{F}$ (No condensation ; see note 1) |
| Storage temperature |  | $-20^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C} /-4{ }^{\circ} \mathrm{F}$ to $140{ }^{\circ} \mathrm{F}$ |
| Power supply |  | $100 \mathrm{~V} \mathrm{AC} \mathrm{to} 230 \mathrm{~V} \mathrm{AC} \pm 10 \%$ |
| Power consumption |  | 30 VA |
| Mass |  | Approx. $2 \mathrm{~kg} / 4.41 \mathrm{lbs}$ |

## Expantion I/O boards(Option)

| $\begin{aligned} & \hline \text { BCD Unit } \\ & \text { LZ51-B } \end{aligned}$ |  |  |
| :---: | :---: | :---: |
|  | Output | 7-digit parallel data ( 4 bits $\times 7$ digits), sign (1 bit), READY signal ( 1 bit), positive/negative logic selectable |
|  | Electrical | Open collector (48 VDC max.); Ic=300 mA Output IC: SN75468NS |
|  | Latch input | 5 to 24 VDC photo coupler; BCD output alone or both BCD output and display can be latched |
| Comparator Unit |  |  |
| LZ51-K/R | Comparison data | Current value, max. value, min. value, p -p value |
|  | Upper/lower limits settings | Selectable from max. of 16 sets (max.) of data ( 1 set consists of 1 to 4 comparison data) |
|  | Go/No Go evaluation | 5 points, Open collector (24 VDC max.); Ic=300 mA; Output IC: SN75468NS; relay output |
|  | Ext. input | 5 VDC to 24 VDC photo coupler |
| RS-232C Unit |  |  |
| LZ51-C | Transfer rate | 600, 1200, 2400, 4800, 9600, 19200 bps |
|  | Stop bit | 1 or 2 bits |
|  | Parity | Odd, even, no parity |
|  | Data length | 7 or 8 bits |
|  | Data processing speed | $20 \mathrm{data} / \mathrm{s}$ (at 9600 bps ) |
| A/B phase Unit LZ51-H |  | A/B phase output (1st or 2nd axis) Differential 75113 and open collector 7407 |

Note 1 : Guaranteed ranges under the applicable safety standard are 0 to $31^{\circ} \mathrm{C}(80 \% \mathrm{RH}), 31^{\circ} \mathrm{C}(80 \% \mathrm{RH})$ to $40^{\circ} \mathrm{C}(50 \% \mathrm{RH})$.
*LY51's circuit ground is insulated from its chassis but like insulation is not provided for some gauge or scale units connected with LY51.
Care must be used when connecting a positiveground circuit.

## Dimensions

## Mounting window



Front mounting


Rear mounting


