

LED BARGRAPH WITH SINGLE OR DUAL STRIP LIGHT

Format : 144 x 72 mm

type : BGL172

LOREME

- **Process Input:** mA, mV, V (configurable)

- **Display:**

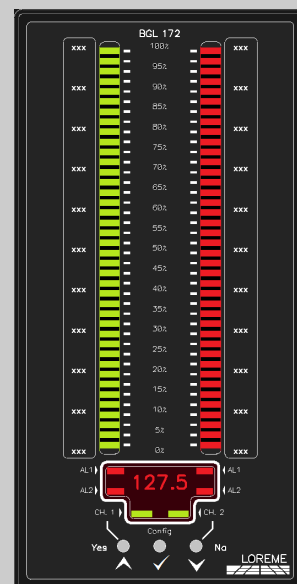
40 leds strip light, 10 000 pts red led display

available in Green, Yellow, Blue colors

- **BGL172-1:** Single strip light with display version

- **BGL172-2:** Dual strip light with display version

- **BGL172/R:** with alarms relays option



The BGL172 is a numeric bargraph, allowing with the strip lights to quickly appreciate the measurement magnitude as well as it's variance. It's digital display provide a more accurate reading.

DESCRIPTION:

Inputs:

The two input channels are independently configurable for voltage or direct current measurement.

- Current 0..4....20 mA,
- Voltage on 3 input ranges : 0....150mVdc , 0...20Vdc , 0....200Vdc (all scales can be carried out in input ranges limits)

Measures:

- Physical unit range conversion (customizable front scale)
- Square root extraction
- Non linear scale (Multi-segments)

Front panel:

- Measure strip light : 40 points resolution (two display mode : dot or bar)
- Over-current alarm threshold setting
- 4 digits alphanumerical led matrix display; 10 000 points resolution
- Display of channel 1 or channel 2 selectable in front panel
- Channel number LED indication
- Alarm indication LED
- Three buttons for fully configuration (input type, thresholds setting, communication, output. Front face access can be locked by the serial link).

Relays:

Up to 4 relay outputs, which can be used in alarm or in regulation mode (input current loop breaking detection)

Threshold, direction, hysteresis and delay (on & off delay) are individually setting for each relays

Analog output (option /S):

1 isolated analog output for each measure channels current or voltage settable: 0 ... 4 ... 20 mA ; 0...1...5...10 V Settable response time and burn-out value for each output

Communication interface:

Several communication protocol available in option for measure reading:

- RS485 : Modbus RTU, Profibus-dp
- Ethernet : Modbus TCP

Configuration:

Device is fully configurable with the front panel buttons or via serial link (USB configuration cable supplied separately.)

- firmware update possible through the serial link

Feature:

- DIN panel case : 144mm x 48mm x 85mm (HxLxD)
- Snap-in fixing by plastic clamps
- Connection on pluggable spring terminal blocks (1mm² maxi section)
- conformal coating
- Protection rating IP20
- Galvanic isolation input / output / power supply / relays / communication
- Universal Ac / Dc power supply not polarized
- Configuration parameters backup on FLASH

Versions and order codes:

BGL172-1: Single strip light with display version
BGL172-2: Dual strip light with display version

OPTION :

/R1: 1 relay assignable to channel 1 ,channel 2 or both
/R2: 2 relays assignable to channel 1 ,channel 2 or both
/R3: 3 relays assignable to channel 1 ,channel 2 or both
/R4: 4 relays assignable to channel 1 ,channel 2 or both
/S: 1 analog output for each measure channels
/CM RS485 MODBUS link
/CP RS485 PROFIBUS-DP link
/CMTCP Ethernet MODBUS TCP link

Remarks:

* /R3,/R4 /S, /CM, /CP, CMTCP options may not be combined !

* default display color: red

Connectors : Pluggable screw terminal blocks connections in standard
Pluggable spring terminal blocks connections on request

INPUT (12 bits resolution)		
TYPE	RANGE	ACCURACY
Voltage	200 mV	+/- 0.3mV
Input impedance	>1 MΩ	
Voltage	20 V	+/- 0.015 V
Input impedance	250 kΩ	
Voltage	200 V	+/- 0.15 V
Input impedance	2 MΩ	
Current	20 mA	+/- 0.01 mA
Input impedance	100Ω	
Response time: 125 ms / Channel (8 measures per seconds)		

ANALOG OUTPUT		
TYPE	RANGE	ACCURACY
Current	0 ... 4 ... 20 mA	+/- 10 μA
Maximum load	750 Ohms	

RELAYS

Changeover contact, switching capacity : 1 A / 250 Vac

COMMUNICATION

Modbus RTU / RS485 from 1200 to 38400 bauds
 Profibus DP / RS485 from 9600 to 1.5M bauds.
 connection : terminal blocks
 Modbus TCP / Ethernet 10/100 base T (RJ 45 connection)

POWER SUPPLY

(to be defined at order)
 20.....265 Vac-dc, 3 VA
 or 9.....30 Vdc, 3 W
 Reverse polarity protected

ENVIRONMENT

Operating temperature -10 to +60 °C
 Storage temperature -20 to +85 °C
 Thermal drift 0.005 % / °C (of full scale)
 Relative humidity 85 % (non condensed)
 Weight ~ 400g

Protection rating IP20
 IP54 in option (without buttons)

Dielectric strength 1500 Vrms continuous
 inputs / power supply / relays

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4	
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A	
EN 61000-4-3 RF	EN 61000-4-9 pulse MF		
EN 61000-4-4 EFT	EN 61000-4-11 AC dips		
EN 61000-4-5 CWG	EN 61000-4-12 ring wave		
EN 61000-4-6 RF	EN 61000-4-29 DC dips		

WIRING AND OUTLINE DIMENSIONS:

Panel cutout : 66 x 139 mm

