

LARGE DISPLAYS 4- OR 6-DIGIT 2.3" AND 4" HIGH FOR TEMPERATURE, PROCESS, ASCII OR BCD INPUTS AND CLOCK DISPLAYS

LDP1 Series



- ✓ Bright 2.3" (57 mm) or 4" (100 mm) 7-Segment Displays with Minus Sign
 - ✓ Red or Green for Easy Viewing
 - ✓ Very High Accuracy, 0.1% Full Scale
 - ✓ Rugged Aluminum Case Can Be Free Standing, Panel or Wall Mounted
 - ✓ Sealed Front Bezel Provides NEMA-4 (IP65) Front Protection
 - ✓ 115 or 220 Vac Models Available
- Models:**
- ✓ Clock Displays 4 or 6 Digits
 - ✓ Parallel BCD Logic 4 or 6 Digits
 - ✓ Serial ASCII 4 or 6 Digits
 - ✓ Process DC Voltage 0-1 V to 0-200 Vdc
 - ✓ Process DC Current 0-1 mA to 0-50 mA
 - ✓ Thermocouple J, K, T, E, R, S & J DIN
 - ✓ RTD $\alpha = 0.00385$, 0.1 or 1°
 - ✓ Ratemeters 4 or 6 Digits
 - ✓ Totalizers up/down Quadrature Frequency Meters



The LDP Series large displays have high output red or green displays for easy viewing in most applications.

The LDP-12x has 2.3" digits which can be seen from 50' away, and the LDP-14x has 4" digits which can be seen from 200'.

The rugged extruded aluminum cases can be either free standing, mounted in a panel or on a flat surface (optional wall mount bracket required).

SPECIFICATIONS

Display Type: 4-digit
Digit Height: 57 or 100 mm (2.3 or 4")
Symbols: -999999 to 999999 (6-digit model)
Polarity: Minus only (-)
Overrange: Display flashing
Decimal Point: Jumper selectable
Read Rate: 2.5/sec

Environmental

Operating Temperature:

0 to 50°C (32 to 122°F)

Storage Temperature:

-20 to 85°C (-4 to 185°F)

Relative Humidity:

0 to 85% non-condensing

Protection: NEMA-4 (IP65)

Mechanical

Case Material: Aluminum extrusion

Finish: Black anodized

Electrical

Standard Power: 115 Vac $\pm 10\%$

50/60 Hz (optional 230 Vac)

Power:

4 & 6 digit/2.3" = 6 VA maximum

4 & 6 digit/4" = 12 VA maximum

Weight:

4 digit/2.3" = 2.3 Kg (5 lb)

4 digit/4" = 5 Kg (11 lb)

6 digit/2.3" = 2.7 Kg (6 lb)

6 digit/4" = 5.7 Kg (12.5 lb)

Large Temperature Displays



SPECIFICATIONS

Thermocouple Models

Cold junction compensation

Sensor break detection

Ordering Examples: **LDP-124-J1-R-1** is a 2", 4-digit red type J thermocouple thermometer with range -50 to 600°C. **LDP-144-T2-G-1** is a 4" 4-digit green type T thermocouple thermometer with range of -40 to 750°F.

SPECIFICATIONS

RTD (Pt 100)

2- or 3-wire connections

Sensor break detection

Automatic lead wire compensation to 10 Ω

To Order

Model Number	Type	Range
Thermocouple Input 4-Digit Red† Display		
LDP-1(*)4-J1-R-1	J	-50 to 600°C
LDP-1(*)4-J2-R-1	J	-40 to 1000°F
LDP-1(*)4-K1-R-1	K	0 to 1250°C
LDP-1(*)4-K2-R-1	K	32 to 2250°F
LDP-1(*)4-T1-R-1	T	-50 to 400°C
LDP-1(*)4-T2-R-1	T	-40 to 750°F
LDP-1(*)4-E1-R-1	E	0 to 650°C
LDP-1(*)4-E2-R-1	E	32 to 1200°F
LDP-1(*)4-R1-R-1	R	1000 to 1750°C
LDP-1(*)4-R2-R-1	R	1800 to 3150°F
LDP-1(*)4-S1-R-1	S	970 to 1750°C
LDP-1(*)4-S2-R-1	S	1775 to 3150°F

Complete with owner's manual, power and signal connectors, and panel mounting hardware.

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price.

(*) Indicate "2" for 2.3-inch display or "4" for 4-inch display.

Ordering Examples: **LDP-124-J1-R-1**, 2", 4-digit red Type J thermocouple thermometer with a range of -50 to 600°C. **LDP-144-T2-G-1**, 4", 4-digit green Type T thermocouple thermometer with a range of -40 to 750°F.

To Order

Model Number	Type	Range
100 Ω RTD Input 4-Digit Red† Display		
LDP-1(*)4-M1-R-1	PT100	-185.0 to 830.0°C
LDP-1(*)4-M2-R-1	PT100	-300 to 1526°F
LDP-1(*)4-M3-R-1	PT100	-300.0 to 999.9°F

Complete with owner's manual, power and signal connectors, and panel mounting hardware.

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price.

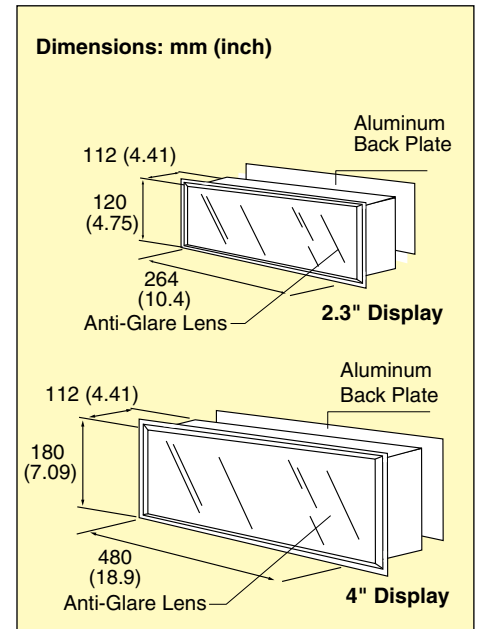
(*) Add "2" for 2.3-inch display or "4" for 4-inch display.

Ordering Examples: **LDP-124-M1-R-1**, 2", 4-digit red RTD thermometer with a range of -185 to 830.0°C. **LDP-144-M2-G-1**, 4", 4-digit green RTD thermometer with a range of -300 to 1526°F.

Accessory (available with all models)

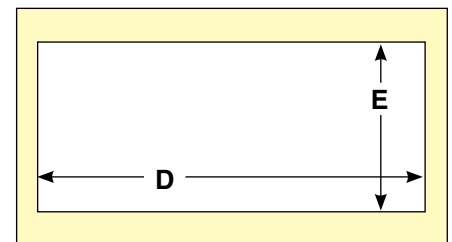
Option	Description
LDP-18-WMB	Wall mounting bracket

LDP-1 Dimensions



Note: Add 27 mm (1.1") to depth for power connector

Panel Cut-Out

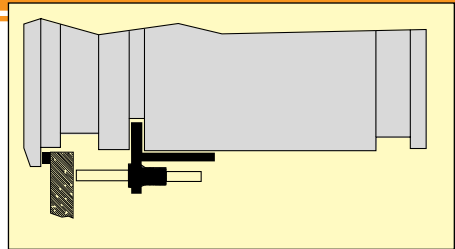


Panel Cut-Out Dimensions in mm (inch)

Digits	Height	Panel Cut-Out	
		D	E
4	57 (2.3)	256 (10.07)	112 (4.4)
4	100 (4)	472 (18.58)	172 (6.77)
6	57 (2.3)	376 (14.8)	112 (4.4)
6	100 (4)	680 (26.77)	172 (6.77)

LDP-1

Large Process and Pulse Input Displays



LDP-18-WMB, Mounting Bracket for LDP-1 Series.

To Order	
Model Number	Type
Rate/Totalizer 4-Digit Red Display	
LDP-1(*)4-FF-R-1	Ratemeter
LDP-1(*)4-F1-R-1	Totalizer with inhibit function
LDP-1(*)4-F2-R-1	Tot with up/down control
LDP-1(*)4-F3-R-1	Tot with up/down, separate inputs
LDP-1(*)4-F5-R-1	Tot with up/down, quadrature control
LDP-1(*)4-F6-R-1	Tot with up/down, quadrature control X4
Rate/Totalizer 6-Digit Red Display	
LDP-1(*)6-FF-R-1	Ratemeter
LDP-1(*)6-F1-R-1	Totalizer with inhibit function
LDP-1(*)6-F2-R-1	Tot with up/down control
LDP-1(*)6-F3-R-1	Tot with up/down, separate inputs
LDP-1(*)6-F5-R-1	Tot with up/down, quadrature control
LDP-1(*)6-F6-R-1	Tot with up/down, quadrature control X4
Rate/Totalizer Programming Keyboard (1 Required)	
LDP-TOT-KBD	Programming keyboard

Complete with owner's manual, power and signal connectors, and panel mounting hardware.

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price.

(*) Input "2" for 2.3-inch display or "4" for 4-inch display.

Ordering Examples: 1.) LDP-124-FF-R-1, 2", 4-digit red ratemeter, and LDP-TOT-KBD, programming keyboard. LDP-146-F3-G-1, 4", 6-digit green totalizer with separate up and down inputs, and LDP-TOT-KBD, programming keyboard.



Process Voltage/ Current

To Order	
Model Number	Type
Process Voltage/Current Input 4-Digit Red Display	
LDP-1(*)4-P1-R-1	Voltage: 0-1, 0-5, 1-5 Vdc Current: 0-1, 0-5, 1-5, 0-20, 4-20, 0-50, 10-50 mA dc
LDP-1(*)4-P2-R-1	Voltage: 0-1, 0-10, 0-100, 0-200 Vdc

Complete with owner's manual, power and signal connectors, and panel mounting hardware.

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price.

(*) Input "2" for 2.3-inch display or "4" for 4-inch display

Ordering Examples: LDP-124-P1-R-1, 2", 4-digit red low range process meter. LDP-144-P2-G-1, 4", 4-digit green high range process meter.

SPECIFICATIONS

Process Models Transducer Excitation:

10 to 24 Vdc, 50 mA maximum

Ranges: Fixed ranges jumper selectable plus fully scalable within any range

Display: Fully scalable to engineering units plus zero offset

Accessory (available with all models)

Option	Description
LDP-18-WMB	Wall mounting bracket

SPECIFICATIONS

Rate/Totalizer

Signal Inputs: (jumper selectable)

PNP, NPN, NAMUR & Switches

Maximum Input Voltage: 28V

Pick-up: (Chan 1 only)

Sensitivity: 150 mV

Hysteresis: 100 mV

Impedance: 26.5 kΩ @ 60 Hz

Maximum Input voltage ± 50V

Input Trigger:

Logic Level 1 >3.75 Vdc >7.5 Vdc

Logic Level 0 <1.5 Vdc <5.5 Vdc

Frequency Inputs: (jumper selectable)

Two ranges, 0.03 Hz to 100 Hz or to 10 kHz

Excitation Voltage: 15 Vdc @ 100 mA

LDP-1

Large Clock and Digital Input Displays



Clock Displays Available

HH : MM : SS
(Hours : Minutes : Seconds)

HH : MM
(Hours : Minutes)

MM : SS
(Minutes : Seconds)

SPECIFICATIONS

Serial ASCII

Signal Inputs: (jumper selectable)

- TTL
- 2 mA loop
- 20 mA loop
- Bipolar ± 5 V (RS-423)
- Bipolar ± 15 V (RS-232)
- default setting)
- Differential RS-422/RS-485
- Receiver Loop Source

Handshake Protocol: not required, will accept continuous data

SPECIFICATIONS

Parallel BCD

Inputs:(Date, hold and decimal points)

- Logic Level 1 > 4.3 Vdc
- max. 40 Vdc
- Logic Level 0 < 1.1 Vdc

Consumption: 4 mA @ 24 Vdc

Controls: Hold, Test, Blanking

Outputs: RS-232/RS-422 (jumper select)

To Order

Model Number	Type
4-Digit Red[†] Clock Displays	
LDP-1(*)4-C-0-R-1	MM:SS
LDP-1(*)4-C-1-R-1	HH:MM
6-Digit Red[†] Clock Displays	
LDP-1(*)6-C-2-R-1	HH:MM:SS

Complete with owner's manual, power and signal connectors, and panel mounting hardware

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price

(*) Input "2" for 2.3-inch display or "4" for 4-inch display

Ordering Examples: LDP-124-C-1-R-1 is a 2", 4-digit red display clock set to read HH:MM.

LDP-146-C-2-G-1 is a 4", 6-digit green display clock set to read HH:MM:SS.

To Order

Model Number	Type
4-Digit Red[†] ASCII Displays	
LDP-1(*)4-S-R-1	Compatible with DP41
6-Digit Red[†] ASCII Displays	
LDP-1(*)6-S-R-1	Compatible with DP41

Complete with owner's manual, power and signal connectors, and panel mounting hardware

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price

(*) Input "2" for 2.3-inch display or "4" for 4-inch display

Ordering Examples: LDP-124-S-R-1 is a 2", 4-digit red ASCII display.

LDP-146-S-G-1 is a 4", 6-digit green ASCII display.

To Order

Model Number	Type
4-Digit Red[†] BCD Displays	
LDP-1(*)4-P-R-1	Compatible with DP41
6-Digit Red[†] BCD Displays	
LDP-1(*)6-P-R-1	Compatible with DP41

Complete with owner's manual, power and signal connectors, and panel mounting hardware

† To order green display, change "R" to "G" in model number; same price.

To order 230 Vac version, replace last "1" in Model Number with "0"; same price

(*) Input "2" for 2.3-inch display or "4" for 4-inch display

Ordering Examples: LDP-124-P-R-1 is a 2", 4-digit red BCD display.

LDP-146-P-G-1 is a 4", 6-digit green BCD display.