



TYPE: LD-PROCESS



LD-PROCESS Voltage & Current Input Large Digit Display

Description

The LD-PROCESS is a large digit display for use with most industry standard voltage and current signals. Various options are available including 4 or 6 digit versions, different height digits allowing for viewing from up to 200 metres, DC or AC powering and different mounting options.

The digit heights that are available include 57mm (25m viewing distance), 102mm (50m viewing distance), 150mm (75mm viewing distance), 200 (100m viewing distance), 300mm (140m viewing distance) and 400mm (200m viewing distance). Mounting options available include panel mounting, suspension mounting and wall mounting. Power supply options available include 95-265vac, 11-30vdc and 48vac. Output options are 4-20mA, 0-10V, $\pm 10V$, 2 relay alarms, 4 relay alarms, RS232 or RS485.

The main application for the LD-PROCESS is for simple hoist/winch monitoring and process plant monitoring. The various output options available allow for the re-transmission of the display signal or for process control.

Different input signals are available including serial input (see LD-SERIAL) and load cell/strain gauge bridge input (see LD-STRAIN). LCM Systems engineers will be pleased to discuss your specific application requirements with you. They will be able to advise on the correct product selection, options required and advise on suitable sensors, where required.

Features

- Suitable for most process analogue current and voltage signals
- Digit heights 57, 102, 150, 200, 300 or 400mm
- Viewing distances from 25, 50, 75, 100, 140 or 200 metres
- Suspension, panel or wall mounting options
- AC or DC powered versions
- Wide choice of analogue, relay or digital outputs
- IP65 sealed

Typical Applications

- Crane weighing
- Winch monitoring
- Process line monitoring

Specification

Power supply	95-265vac (optional 11-30vdc or 48vac)
Power rating	40 VA maximum
Input signal	DC Voltage: 0-10V, 0-5V, 1-5V DC Current: 0-10mA, 0-20mA, 4-20mA
Excitation voltage	24vdc (60mA maximum current) 10vdc (20mA maximum current)
Input resistance	1MegoHM for voltage inputs 33ohms for current inputs
Accuracy	$\leq \pm 0.05\%$ of range
Zero temperature coefficient	$< 30\text{ppm}/^\circ\text{C}$
Span temperature coefficient	$< 25\text{ppm}/^\circ\text{C}$
Filtering	Selectable time constants from 0-25 seconds
Display update rate	10 readings per second
Internal resolution	1 part in 400,000 maximum over full range
Display range	4 digit version: -1999 to 9+1999 6 digit version: -199999 to +199999
Connections	All user/installation connections using detachable field screw terminals
Case material	Heavy duty uPVC
Storage temperature	-20 to +70°C
Operating temperature	0 to +50°C (internal heater option to allow operation to -25°C)
Environmental sealing	IP65

Ordering Guide

Create a full part number like this:-

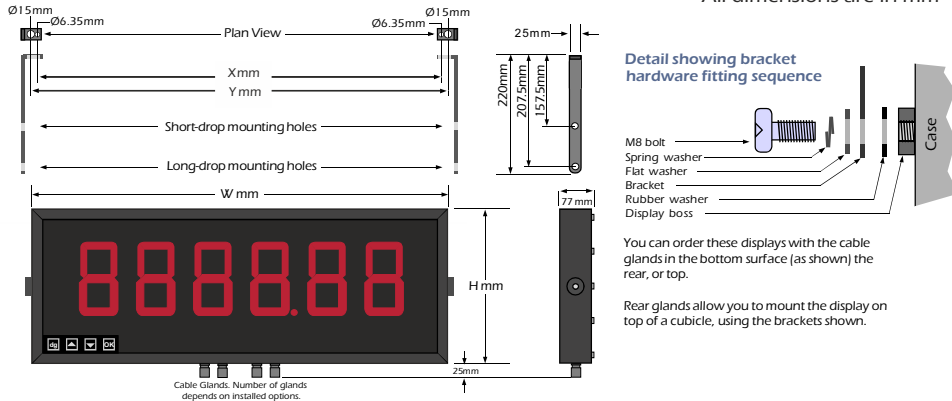
Model	Display Height	Digits	Analogue Output	Alarm Output	Serial Data Output	Colour (Red)	Voltage Supply	Mounting & Gland Position & Sealing
LD-PROCESS	2" (57mm) Digits -F2 4" (102mm) Digits -F4 6" (150mm) Digits -F6 8" (200mm) Digits -F8 12" (300mm) Digits -F12 16" (400mm) Digits -F16	4 Digits -4N 6 Digits -6N	No Output -0 4-20mA -ANI 0-10V -ANV $\pm 10V$ -ANB	No Alarms -0 2 Alarms -AL2 4 Alarms -AL4	No Data -0 RS232 -232 RS485 -485	Indoor Viewing -R Outdoor Viewing -RDLV	95-265VAC -AC 11-30VDC -DC 48VAC -48VAC	Panel, IP65 Front -1 Wall, Bottom, IP65 -2 Suspension, Top, IP65 -3

Example - LD-PROCESS display 102mm high, 4 display digits, RS485 output, 2 alarms, outdoor viewing, 110vac powered with suspension mount
Order code = LD-PROCESS-F4-4N-54-0-AL2-0-RDLV-AC-3

LD-PROCESS Voltage & Current Input Large Digit Display

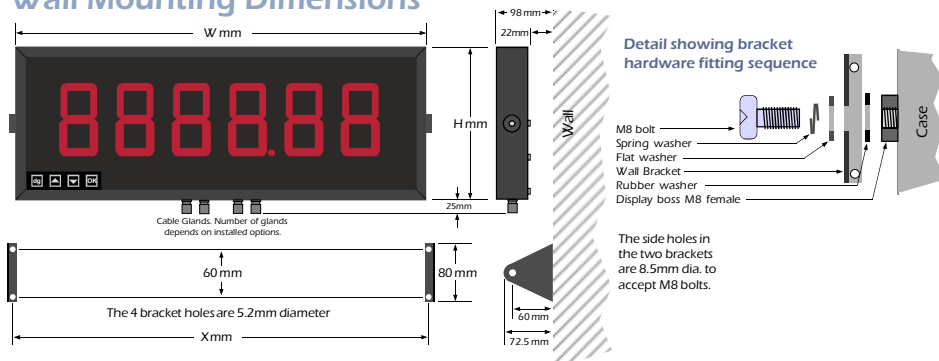


Suspension Mounting Dimensions



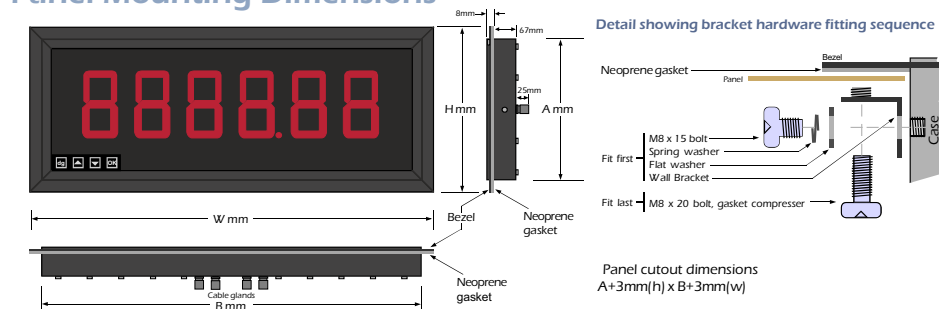
	57mm digits		102mm digits		150mm digits		200mm digits		300mm digits		400mm digits	
	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit
X mm	219.5	316	374	556	520	760	690	1012	990	1480	1308	1960
H mm	154.5	154.5	195.5	195.5	246	246	290	290	408	408	515	515
W mm	279.5	376	434	616	580	820	750	1072	1050	1540	1368	2020
Y mm	249.5	346	404	586	550	790	720	1042	1020	1510	1338	1990

Wall Mounting Dimensions



	57mm digits		102mm digits		150mm digits		200mm digits		300mm digits		400mm digits	
	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit
X mm	266.5	363	421	603	567	807	737	1059	1037	1527	1355	2007
H mm	154.5	154.5	195.5	195.5	246	246	290	290	408	408	515	515
W mm	279.5	376	434	616	580	820	750	1072	1050	1540	1368	2020

Panel Mounting Dimensions



	57mm digits		102mm digits		150mm digits		200mm digits		300mm digits		400mm digits	
	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit	4 digit	6 digit
H mm	172.5	172.5	213.5	213.5	264	264	308	308	426	426	533	533
A mm	154.5	154.5	195.5	195.5	246	246	290	290	408	408	515	515
B mm	279.5	376	434	616	580	820	750	1072	1050	1540	1368	2020
W mm	297.5	394	452	634	598	838	768	1090	1068	1558	1386	2038

www.lcmsystems.com

LCM Systems Ltd

Unit 15, Newport Business Park, Barry Way
Newport, Isle of Wight PO30 5GY UK

Tel: +44 (0)1983 249264

sales@lcm.com

www.lcm.com

Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

Issue No. 1

Issue date: 28/02/2019

APPROVED

(unapproved if printed)