



## Weight Indicator-LD 5250

### Product Description

The LD5250 is a member of the LD5200 series of digital indicators and controllers, designed for demanding weighing applications with the need of digital and analogue interfacing to higher level process control equipment. Industrially oriented hardware and proven software allow simple operation at high accuracy and reliability, in a small panel mount enclosure and at an attractive price. Up to 30 units can be connected via industrial Network to a PC for multi-weigher applications.



### Basic Features

- Approved for 10,000d
- Up to 70 measurements per second
- Alibi-memory for 10,000 records
- Parallel connection of up to 10 strain gauge load cells
- Display resolution up to 99,000div.
- Bright, 6-digit, red LED display (14mm)
- Serial RS232 port for connection to serial printer, PC or remote display
- 1 digital input (programmable as tilt input or to tare scale remotely or for other purposes)
- 2 digital outputs (programmable as weight set points or as other control outputs)
- Compact, plastic panel mount enclosure (IP40 protection)

### Application

- Simple weight display
- Mixing plants
- Weighing automation systems

### Operating Functions

- Weight display
- Zero, Tare, Tare recall, Print, Total
- Status annunciators for set points
- Operation and setting via keyboard or serial commands
- Printouts with weight, totals and error reports

### Options

- Additional RS485 or RS232 serial port with network capability
- Analogue output (current or voltage)

## Specifications

### DISPLAY - KEYBOARD

DISPLAY	6 digit, 7 segment, LED, red, 14mm digit height
STATUS ANNUNCIATORS	No motion, zero, tare in use, net, set points in operation
KEYBOARD	6 key membrane keyboard with tactile feedback
DECIMAL POINT SETTING	Between any digit of the weight display
DISPLAY STEP	1, 2, 5, 10, 20, 50, 100, 200 (set-up selectable)
DISPLAY DIGITS	4, 5, 6 (set-up selectable)

### SCALE CALIBRATION & FUNCTIONS

CALIBRATION	Digital calibration (dead load and span) and scale parametrization via keyboard dialogue menu . The weight display can be set to any capacity and resolution with 6 digits (subject to application and regulations). Electronic calibration can be also performed via the mV/V output values of load cells.
WEIGHING FUNCTIONS	Automatic zero tracking, no-motion detection, auto-zero on power-up, zero, tare (max tare effect = -Max), multiple test functions
FULL SCALE RANGE	The two most significant decades of the digital display are programmable from 1 up to 99 for the full scale range. Single or dual interval / range, auto-switching between the different display steps. Serial EEPROM for the storage of calibration data (32KB)
MEMORIES	Flash, tally-roll (Alibi) memory capable of 10,000 weight registrations (64KB)

### A/D CONVERTER

TYPE	Sigma-Delta ratiometric with analogue and digital filtering (FIR & post filtering, rolling average)
CONVERSION RATE	3 up to 70 measurements per second (set-up selectable)
SENSITIVITY	0.4µV/VS for approved scales, 0.1µV/VS for non-approved scales
ANALOGUE SIGNAL RANGE	-0.25 to 2mV/V (-1.25mV to -10mV) or -0.25 to 4mV/V (-1.25mV to -20mV)
RESOLUTION	Internal 550,000 counts, Display : 990,000 (selectable, in accordance with regulations)

### CONTROL I/O

DIGITAL INPUT (x1)	9-24 VDC, positive common, opto-isolated to 2.5 KV, set up programmable
DIGITAL OUTPUTS (x2)	24 VDC ±10%, transistor (SOURCE) darlington, positive common, max current 100 m A, opto-isolated to 2.5KV, set up programmable

### POWER SUPPLY

INPUT VOLTAGE	24VDC
OPTION	Alternatively : 9-15VDC via mains power adapter (factory installed option)

### ENVIRONMENTAL CONDITIONS / CONSTRUCTION

EMC	According to OIML R76 and EN 45501 requirements
OPERATING TEMPERATURE	-10°C to +40°C
STORAGE TEMPERATURE	-10°C to +70°C
HUMIDITY	40% to 90% RH (non condensing)
HOUSING (INOX VERSION)	Plastic, IP40 protection (IP54 for front panel) Dimensions (in mm): 144(L)x72(H)x132(D), panel cut-out : 136.5(L)x66.5(H)

### OPTIONAL FEATURES

SERIAL COM. PORT 2	RS485, set-up programmable, 2400-57600 baud , half duplex, (continuous output, remote printer output, EDP and master-slave protocols)
SERIAL COM. PORT 2	RS232, set-up programmable, 2400-57600 baud , half duplex, (continuous output, remote printer output, EDP and master-slave protocols)
ANALOGUE OUTPUT	Analogue output, current (0/4 -20m A) or voltage (0.02 -10V) (hardware selectable), resol. 16 bit

### LINEARITY & STABILITY

LINEARITY	Within 0.002 % of full scale
LONG TERM STABILITY	0.005 % of full scale per year
TEMPERATURE COEF.	Deadload 2ppm / C, Span 2ppm / C

### INTERFACES

SERIAL COM. PORT 1	RS232, non-programmable, 2400 baud , full duplex (continuous output, printer output, print on demand and Alibi modes)
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### LOAD CELL CONNECTION

NUMBER OF LOAD CELLS	Up to 10 strain gauge load cells, 350 Ω each (or more, provided min input impedance =35Ω)
EXCITATION	+5V alternating polarity or +5VDC (set-up selectable), with sense
CONNECTION TECHNIQUE	6-wire technique

### APPROVALS

ACCURACY CLASS III	EU-Type approval for 10,000 divisions (approval Nr.: DK 0199.27) & OIML R76
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