



## Weight Indicator-LD 5218

### Product Description

The LD5218 is a compact, powerful alphanumeric terminal, designed for numerous weighing applications, varying from a simple fixed tare weighing operation to powerful truck in/out management systems. User friendly configuration and operation, hardware and software reliability, and legal-for-trade accuracy in an attractive enclosure ensure high performance to meet the most demanding needs



### Basic Features

- Approved for 10,000 divisions
- Up to 70 measurements per second
- Alibi-memory for 10,000 records
- Excitation for up to 10 strain gauge load cells, 350Ω each (or more)
- Large, 16 character LCD display (14.5mm) with status annunciators
- 27 keys membrane keyboard with tactile feedback
- Single or dual interval / range
- Analogue and digital filtering
- Standard RS232 for PC or printer connection and RS232/RS485 interface with networking capability
- Real time clock
- 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)
- Stainless steel enclosure (IP65) or powder coated aluminium (IP40)

### Application

- Weighbridges, platform scales or dual scale applications requiring weight indication and professional documentation
- Piece counting (single or dual scale configurations)
- Computer based weighing systems

### Operating Keys

- On / off - Zero scale - Preset tare key
- Tare key
- Tare recall key
- Print key
- 1st and 2nd weighing for weighbridge operations
- Piece counting
- Scale exchange key
- Menu dialogue selection
- Alphanumeric data entry keys
- Front panel key lock capability

### Options

- Analogue output (current or voltage)
- Second analogue input for second scale connection

## Specifications

### DISPLAY - KEYBOARD

|                       |  |
|-----------------------|--|
| DISPLAY               | 16 character, LCD, backlit display, 14.5mm digit height  |
| STATUS ANNUNCIATORS   | No motion, zero, tare in use, net, scale in operation (#1 or #2 or SUM #1+2, if second scale connected), piece counting mode |
| KEYBOARD              | Pseudo-alphanumeric membrane keyboard of 27 keys, with tactile feedback  |
| DECIMAL POINT SETTING | Between any digits of the weight display   |
| WEIGHT DIGITS         | 4, 5, 6 (set-up selectable)  |
| DISPLAY STEP          | 1, 2, 5, 10, 20, 50, 100, 200 (set-up selectable)  |

### SCALE CALIBRATION & FUNCTIONS

|                    |   |
|--------------------|---|
| CALIBRATION        | Digital calibration (deadload and span) via operator friendly, structured menu system. The weight display can be set to any capacity and resolution with 6 digits (subject to application and regulations). Calibration of two analogue inputs (one standard and one optional) with individual coefficients. Electronic calibration can also be 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), preset tare, net mode, 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 (64KB)  |
| MEMORIES           | Flash, tally-roll (Alibi) memory capable of 10,000 weight registrations (64KB). Real-Time-Clock.  |

### 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/VSI for approved scales, 0.1µV/VSI for non-approved scales                                    |
| ANALOGUE SIGNAL RANGE | -0.25 to 2mV/V (-1.25mV to -10mV) or<br>-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, positiv common, opto-isolated to 2.5 KV, set up programmable   |
| DIGITAL OUTPUTS    | 24 VDC 10%, transistor (SOURCE) darlington, positiv common, max current 100 m A, opto-isolated to 2.5KV, set up programmable |
|                    | Analogue output, current (0/4 -20m A) or voltage (0.02 -10V) (hardware selectable), resol. 16 bit                            |

### POWER SUPPLY

|              |   |
|--------------|---|
| INOX VERSION | 85-265VAC, 50/60 Hz. Alternatively 9 - 15 V DC via external source                      |
| ALUM VERSION | 85-265VAC, 50/60 Hz. Battery back-up standard via internal rechargeable battery, 6V/3Ah |

### 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- 90% RH, non condensing  |
| HOUSING (INOX VERSION) | Stainless steel, AISI 304, sealed to IP65. Dimensions (in mm): 252(L)x152(H)x62(W)<br>Powder coated aluminium, sealed to IP40. Dimensions (in mm): 206(L)x140(H)x135(W) |

### 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 |

### 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  |

### INTERFACES

|                    |   |
|--------------------|---|
| SERIAL COM. PORT 1 | RS232, non-programmable, 2400 baud, full duplex (continuous output, printer output, print on demand and Alibi modes)                |
| SERIAL COM. PORT 2 | RS485, set-up programmable, 2400-57600 baud, half duplex (continuous output, remote printer output, EDP and master-slave protocols) |

### APPROVALS

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