Industrial software Weighing Indicator

IDe 100

CE

The IDe100 indicator equipped with its industrial software is ideal for all weighing applications requiring integration to automated systems in a difficult environment (Scale – Hopper Weighing – Weighbridge, On-board Weighing)

> Compatible with all strain gauge load cells on the market
> Optimised for the Master K digital load cells
> Excellent accuracy and measurement stability: 6 000 scale divisions
> CE test certificate – Standard NF EN 45 501
> High processing speed: from 60 to 180 measurements/second
> Data Storage Device (DSD) guaranteeing the commercial transactions
> Simple and intuitive operator interface
>   > Alphanumeric guide, 8 characters h = 6 mm
>   > Data weight display, 6 digits h = 14.6 mm
>   > 4 control keys + pseudo mouse
> Configuration and calibration carried out from the Front Panel without special tools
> Management of standard peripherals
> Large choice of data interfaces with PLCs and microcomputer
>   > Analog weight output
>   > BCD or binary digital output
>   > Field bus = Device Net - Modbus + - Profibus
> Packaging to electronic standard - 3U - 42 TE
> 220 V mains supply (110 V on request) or 12 VDC (24 VDC optional)

Operation

The IDe 100 indicator with Industrial Software can be used to carry out basic weighing functions either with operator or using an automated system located locally or remotely.

Functions accessible to an operator

- This key is used to access the weighings stored in the weighing file.
- Weight Reset Key in Gross position - Action limited to +/- 2 % of the maximum range
- Gross/Net switching - Used to display a Gross weight or a Net weight (if allowed by configuration)
- Taring key - Used to eliminate the Tare in Net weight mode (if allowed by configuration)
- Pseudo-mouse: used to move through the menus, for Configuration or Calibration and data entry

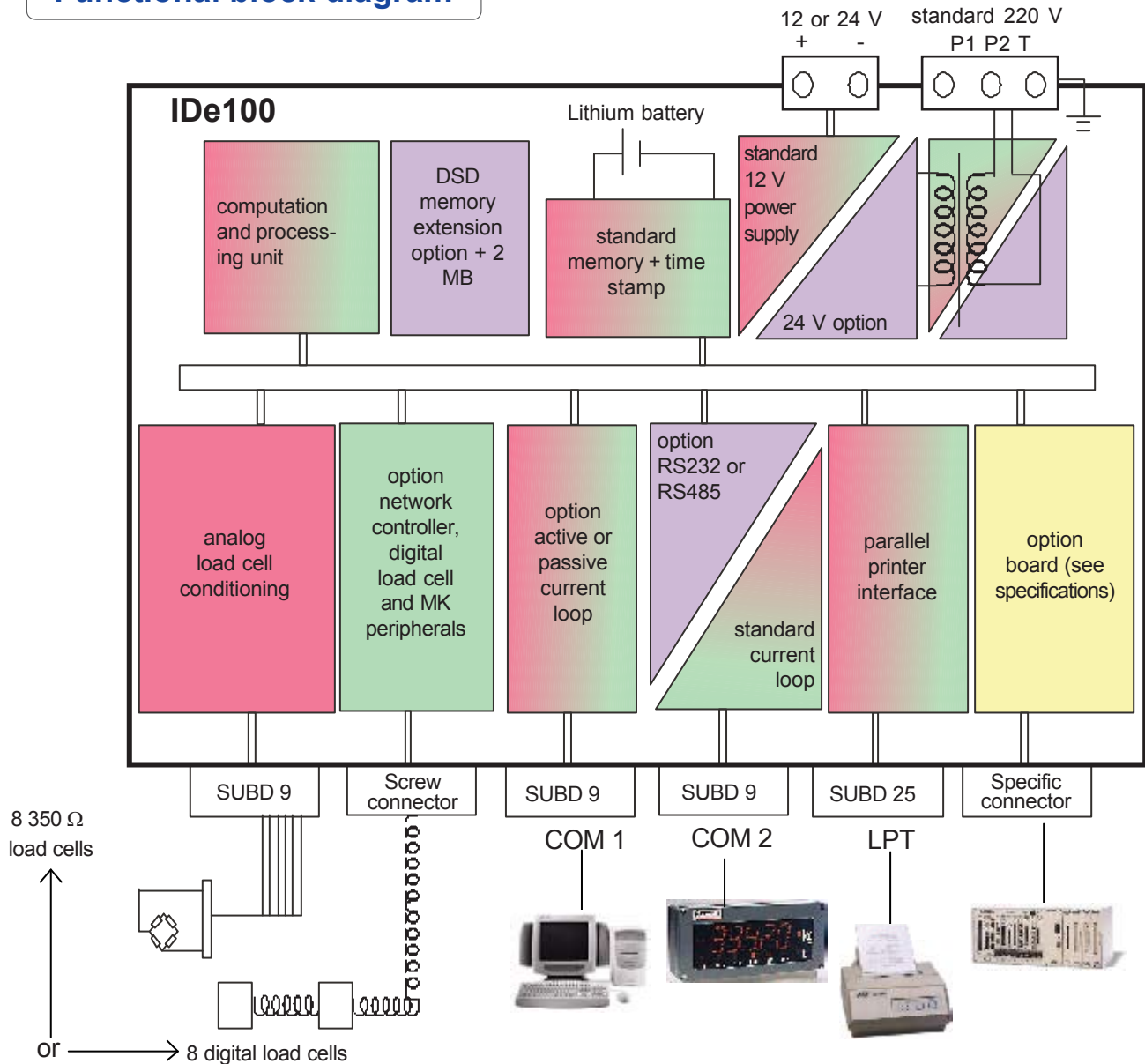Functions accessible to an automated system (PLC or microcomputer)
> Remote control of basic functions to replace the operator:
  - Zero
  - Gross/Net
  - Taring
  - Printout
> Remote control is carried out:
  - either by remote control contacts which use the inputs of the 4I/4O option board
  - or by serial communication or field bus, using a suitable command word
> Monitoring of the three configurable weight thresholds (locally or dynamically by the serial link) which results in the closure of a relay contact with the 4I/4O option board.
> Communication of the Weight data (Gross or Net) with the associated statuses either on the basic COM serial link or via optional boards (0-10V - 4-20mA - BCD - Field Bus).
> Control of a dot matrix printer in serial or parallel mode (COM or LPT).

⚠️ (No Ink Jet or laser printer management)

> Management of an RP15 or R50 remote weight display connected in current loop on COM2

Functional block diagram

IDe100

| computation and process-ing unit | DSD memory extension option + 2 MB | Lithium battery / standard memory + time stamp | standard 12 V power supply / 24 V option | 12 or 24 V + − / standard 220 V P1 P2 T |

| analog load cell conditioning | option network controller, digital load cell and MK peripherals | option active or passive current loop | option RS232 or RS485 / standard current loop | parallel printer interface | option board (see specifications) |

| SUBD 9 | Screw connector | SUBD 9 | SUBD 9 | SUBD 25 | Specific connector |

8 350 Ω load cells

or ⟶ 8 digital load cells

COM 1 COM 2 LPT

Options available

2 BASIC INDICATORS
IDe 100 CCA (analogue load cells)
IDe 100 CCN (digital load cells)
COMMON OPTIONS
DSD Extension option – 100 000 weighings
RS232C OPTO option on COM 2
RS485 Half Duplex option on COM 2
24 V power supply option without 110 V transformer

EXTENSION BOARD (only 1 board possible per IDe)
BCS (// BCD or binary)
4 I/4O
4I/4O and 0 – 10 V / 4 – 20 mA
Device Net network
Profibus DP network
Modbus + network
Ethernet network
PACKAGING
Desktop housing
Waterproof stainless steel housing

CHARACTERISTICS	
Power supply	Mains 220 VAC - 10 + 15%
Standard (specify with the order)	12 VDC ±
Option	24 VDC ±
Consumption	20 VA
EMC Compliance	according to standard EN 45 501
Standard load cell power supply - IDé 100 CCA version	7.5 V alternating square signals
Min. load impedance	45 Ω i.e. 8 x 350 Ω load cells in parallel
MK digital load cell power supply - IDé 100 CCN version	12 V =
Operating temperature	-10/+ 40° C
Storage temperature	-20/+ 60°C
Time stamp drift	+/- 1 min. per month
DSD data restore duration	2 years by Lithium battery
DSD capacity	9000 weighings with Date/Time/Weighing No./Gross/Tare/Net
2 MB memory extension module option	100 000 weighings
METROLOGICAL CHARACTERISTICS according to Standard EN 45 501	
Maximum weighing accuracy	6 000 Scale divisions
Internal resolution	60 000 Scale divisions
Homologated minimum voltage scale division value	0,75 µV
Measurement rate	60 to 180 measurements per second
EXCLUDING LEGAL METROLOGY	
Maximum weighing accuracy	10 000 Scale divisions
Internal resolution	100.000 Scale divisions

Dimensions (lengths in mm)

Front panel

Cut-out for panel mounting without frame

identification plate

8 char.

Side view

cable clearance
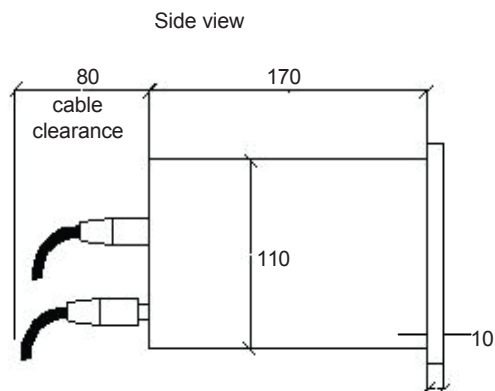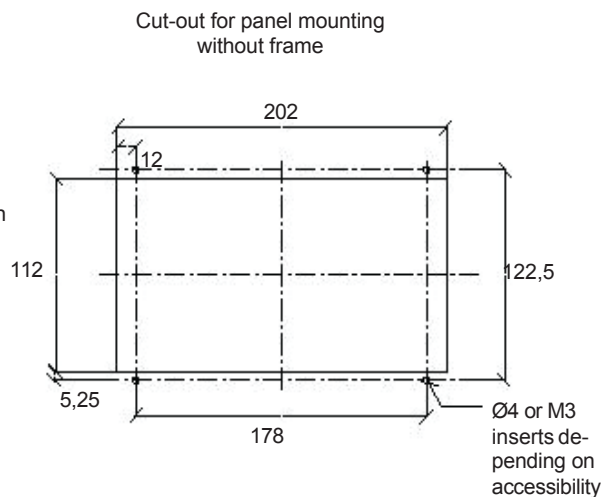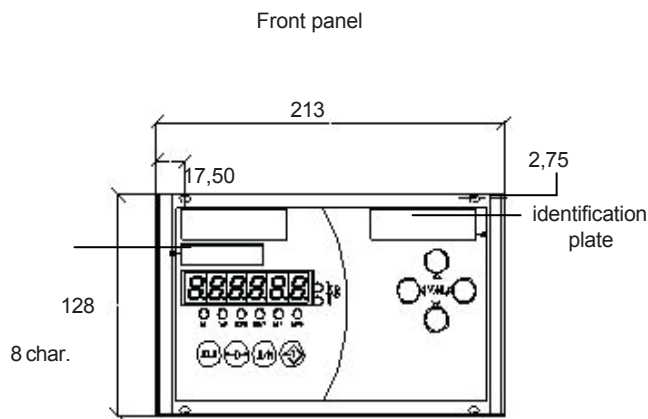
All specifications subject to change without notice.

Ø4 or M3 inserts depending on accessibility

MASTERK
THE MASTERS OF INDUSTRIAL WEIGHING

Supported by the Group company certified :

CE   OIML

IEC   IECQ   OIML   (III)   NTEP   Ex   IP68   RoHS