MV 1000

- **Digital precision weight controller**
- **Optimized for *daisy* tank weight measurement**
- **Different interface options**
- **LCD text display**
- **Enclosure made of stainless steel IP67**
- **Small and extremely robust**

DESCRIPTION:

The MV 1000 is a robust and highly precise control unit for industrial applications.

The MV 1000 is especially designed for the application with *daisy* sensors used in tank weight measurement and level control.

Only little knowledge is needed for the handling of this unit. The MV 1000 has a gross/net switch and thus facilitates the truck preloading for example. The entry of only one correction factor enables a quick adjustment.

The connection to superordinate control units (PLC) can be carried out via an analog current output or a serial RS 485 interface.

As it is compact and made of stainless steel, the MV 1000 can be also used in harsh outdoor environments.

The big LCD clear text display offers a comfortable handling for the user dialogue and the adjustment.

Applications can be found in *daisy* tank weight measurement as well as in legal-for-trade vessel weighing.

FEATURES:

The MV 1000 offers:

- Connection of max. 16 strain gauge load cells
- Legal-for-trade resolution 6000d
- Calibration via menu navigation
- A plug-in-position for following interface options:
  - PC interface
  - Printer interface
  - Remote indication interface
- 2 digital inputs and 2 digital outputs, opto-isolated, 24 V DC
- Power output module 0(4) – 20 mA
- Stainless steel enclosure (IP 67) with integrated power supply unit, alternatively for
  - desktop,
  - wall-mount or
  - panel-mount installation.

TECHNICAL DATA:

MV 1000

Load cell input

Max. # of load cells	16 with 350 Ω each, total load > 21 Ω
Supply	5 V DC
Signal input	± 3 mV/V
A/D converter	19 bits accordingly 524,000 counts

Analog output (optional)*

Bipolar, current or voltage

Voltage	0-10 V or 2-10 V DC, over >500 Ω
Current	0-20 mA, 4-20 mA, resistance < 500 Ω
Frequency filter	0.05 to 75 Hz, belt width selectable
Resolution	15 bits (32,000 counts)
Non-linearity	< 0.01 %
Zero balance	< 0.005 % /°C
Deviation of amplification	< 0.003 % /°C

Serial output (optional)* for connection to printer or PC

Serial interface	RS-485, RS-422, RS-232 2-wire- or 4-wire cable
Baud rate	up to 115.2 kbit/s

Digital inputs and outputs (optional)*

Number	2 each
Voltage	24 V DC, opto-isolated

Inputs for start of weighing and tarring or start/stop of charging
Outputs for switch point control or simple charging

* The MV 1000 has a slot for the alternative usage of one of these interface options.

Calibration

Method	alternatively with weights or digitally via entry of load cell sensitivity; with linearization possibility via operator prompting

Voltage supply

Voltage	alternatively 110-240 VAC, 50-60 Hz 12-30 V DC, 7.5 VA

Environmental conditions

Temperature range	-10 to + 50°C
CE conformity	EMC, industrial area for process control

Protection IP 67

Design Enclosure made of stainless steel

Construction types

Table installation

Dimensions	168x167x115 mm (WxHxD)

Wall installation

Dimensions	168x151x111 mm (WxHxD)

Built-in version

Dimensions	182x145x47 mm (WxHxD)
Panel cut-out	165x129 mm

Display	backlighted LCD text display, figure height 14 mm
Keyboard	5 keys for zeroing, tarring, weight print and special functions
Approval	EC and NTEP type approval as non-automatic scale

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