Digital Weighing Indicator

global weighing technologies

Technical Data

Protection class
Housing: IP 20
Panel mounted: IP 65

Power supply
85–250 V_AC 50/60 Hz
11–36 V_AC or 24 V_AC (Option)
Max. power consumption: 15 VA

Display
Bright 5-digit LED display, 14 mm
Status symbols: brutto/gross, net, tare
Setpoint indication

Keypad
5 keys for operation, calibration and configuration
3 multi-function keys

Digital control inputs
3 configurable user inputs (TTL)
Input voltage: max. 30 V_OC
Sink or source (aktiv/passiv) selectable
Sink: high Vin<0.7 V_OC, low Vin>2.5 V_OC
Source: high Vin>2.5 V_OC, low Vin<0.7 V_OC

Load cell excitation
Jumper selectable:
5 V_OC @ 65 mA max. +/-2 %
10 V_OC @ 125 mA max. +/-2 %

MP 30

- 16 bit resolution and up to 20 readings/sec
- Supply voltage: 85–250 V_AC
  50/60 Hz or 11–36 V_DC
  24 V_AC (option)
- 3 digital control inputs
- Analog output (option):
  0/4–20 mA or 0–10 V_DC
- Serial interfaces (option):
  RS 232 or RS 485
- 2 setpoint outputs (option)
- IP 65 sealed front panel
- Manual tare

MP 30

Load cell excitation
Jumper selectable:
5 V_OC @ 65 mA max. +/-2 %
10 V_OC @ 125 mA max. +/-2 %

Meßeingang

<table>
<thead>
<tr>
<th>Input Range</th>
<th>Accuracy (18 to 28 °C)</th>
<th>Accuracy 0 to 50 °C</th>
<th>Impedance</th>
<th>Max Continuous Overload</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>± 24 mV DC</td>
<td>±0.02 % of reading +3 μV</td>
<td>±0.07 % of reading +4 μV</td>
<td>100 Mohm</td>
<td>30 V</td>
<td>1 μV</td>
</tr>
<tr>
<td>±240 mV DC</td>
<td>±0.02 % of reading +30 μV</td>
<td>±0.07 % of reading +40 μV</td>
<td>100 Mohm</td>
<td>30 V</td>
<td>10 μV</td>
</tr>
</tbody>
</table>

A/D converter
Resolution: 16 bit
A/D Conversion rate: 20 readings/sec

Update rates
Step response: 200 msec. max. to within 99 % of final readout value (digital filter and internal zero correction disabled)
700 msec. max. (digital filter disabled, internal zero correction enabled)

Environmental conditions
Operating temperature range:
0 to 50 °C (0 to 45 °C with all three plug-in cards installed)
Storage temperature range:
-40 to 60 °C
Humidity:
0 to 85 % max. non-condensing

Manual tare
configurable via front keys
Analog output MP 30/20
2 analog outputs with:
0/4-20 mA or 0-10 VDC
Isolation to sensor & user input commons
Accuracy: 0.17 % of FS (18 to 28 °C)
Resolution: 1/3500
Compliance: 10 VDC: 10 KΩ load min.
20 mA: 500 Ω load max.
Update time: max. 200 msec. filter and zero correction disabled
Gross/net selectable

Setpoint output MP 30/10
Type: 2 FORM-C relays
Isolation to sensor & user input commons
Total current:
5 amps at 120/240 VAC or 28 VDC
Life expectancy:
100 K cycles min. at full load rating.
Gross/net selectable

Serial communications
RS 232 (MP 30/31) or
RS 485 (MP 30/32)
Isolation to sensor & user input commons:
Settings: Databits: 7/8, Baudrate:
300-19200, Parity: no/odd/even
Bus address: selectable 0-99;
max. 32 devices per line (RS 485)

Distance: RS 232: up to 15 m
RS 485: up to 1200 m
Low frequency noise rejection
Normal mode: >60 dB at 50 or
60Hz +/-1 %, digital filter off
Common mode: >100 dB, DC to 120 Hz
(w.r.t. earth)
Custom linearization
Data point pairs: selectable from 2 to 16
Display range: -19.999 to 99.999
Decimal point: 0 to 0.0000

Dimensions in inches (mm)

Order numbers:
MP 30/00 Digital Indicator 85 to 250 V AC 9408 800 30001
MP 30/01 Digital Indicator 11 to 36 V AC/DC 9408 800 30011
MP 30/10 Relay Output for MP 30/0x 9408 800 30101
MP 30/20 Analog Output for MP 30/0x 9408 800 30201
MP 30/31 RS 232 Interface for MP 30/0x 9408 800 30311
MP 30/32 RS 485 Interface for MP 30/0x 9408 800 30321

The technical data given here serve only as a product description and must not be interpreted as guaranteed characteristics in the legal sense.