

Weighing Instrument

FEATURES

- Frequency acquisition AC/DC signal up to 1000 Hz
- Able to interface with intrinsically safe barriers for use in hazardous areas
- Capacitive keyboard
- Joint fieldbus and analogue output protocol installation
- Removable terminal blocks

OPTIONS

- Analogue output
- Expanded data storage capacity
- Multiple field bus options available

APPLICATIONS

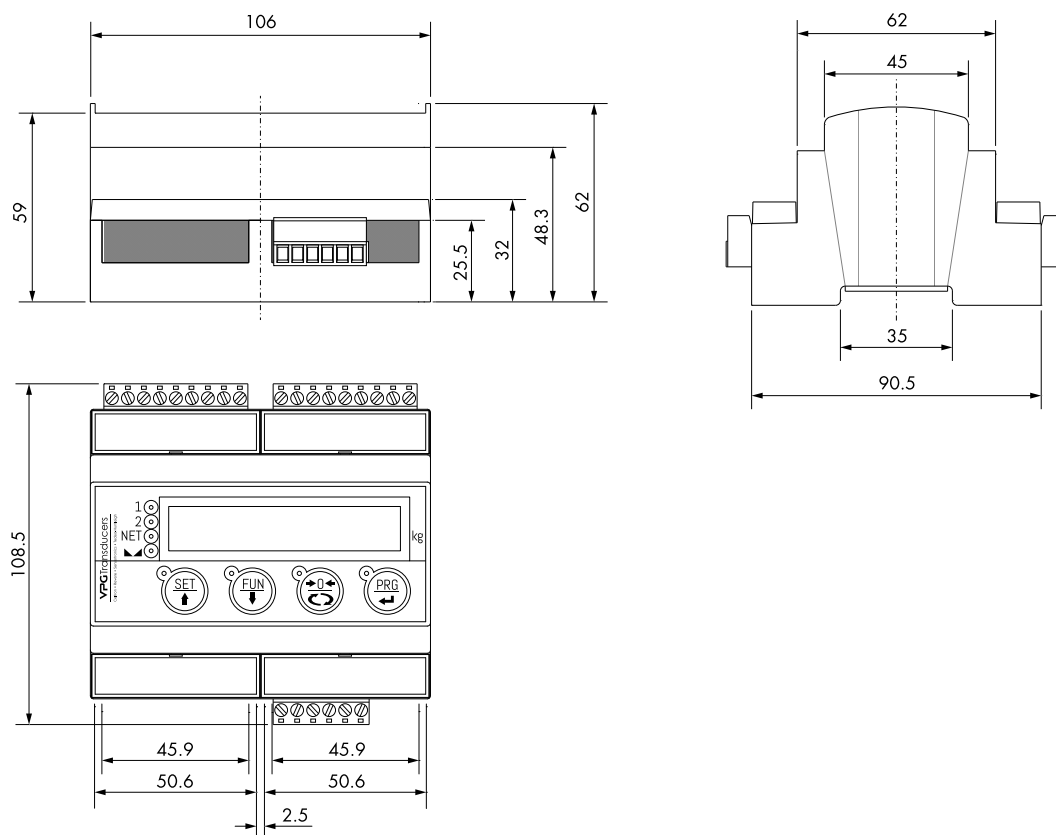
- Various industrial systems



DESCRIPTION

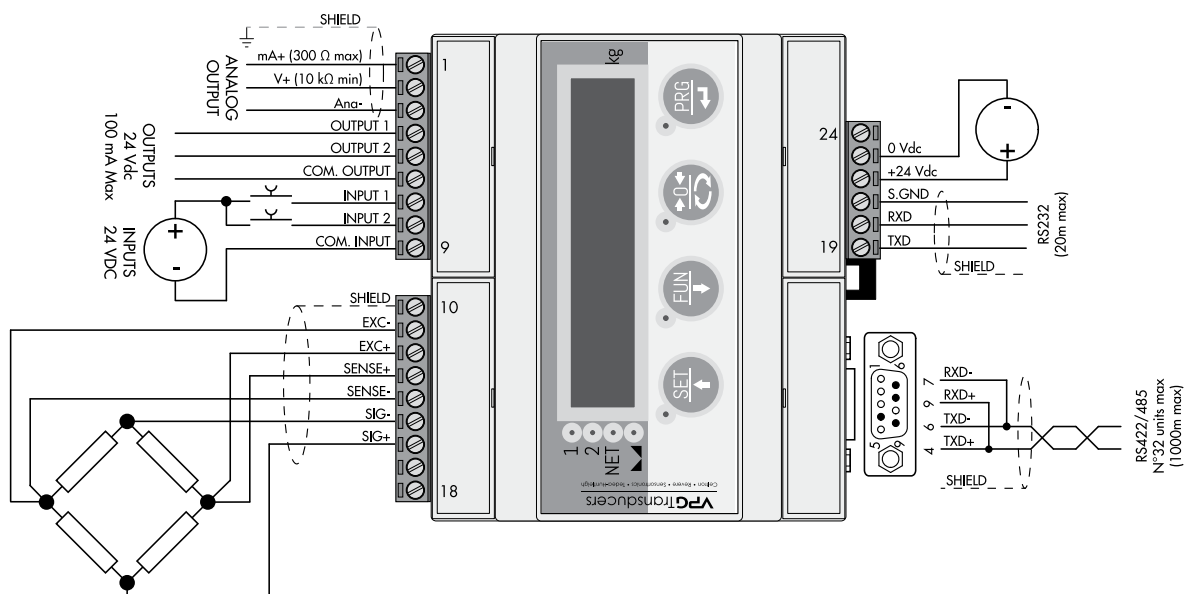
The Model WT14 is a high quality weighing indicator suitable for almost any application. The WT14's four-button capacitive keyboard allows easy access to the configuration and calibration functions. The model comes with RS232 and RS485 serial ports and a USB device port as standard. Additionally, the instrument can be equipped with the most widely used fieldbuses and it can interface with the vast majority of supervision devices currently offered on the market.

OUTLINE DIMENSIONS



Weighing Instrument

WIRING DIAGRAM



SPECIFICATIONS

PERFORMANCE

Power Output
5 V

Measuring Range
-3.9 to +3.9 mV/V

Input Sensitivity
0.02 $\mu\text{V}/\text{division}$

Linearity
 <0.01% of full scale

Temperature Drift
 $<0.001\%$ of full scale $^{\circ}\text{C}$

D/A Convertor
24 bit

Maximum Load Cells
8 at 350 Ω

Frequency Signal Acquisition

Internal Resolution
 >16,000,000 counts

Visible Resolution
999,999 counts (visible on net weight)

Divisions Value (Adjustable)
x 1, x 2, x 5, x 10, x 20, x 50

Decimals Setting

0.0, 0.00, 0.000, 0.0000

Filter (Adjustable)
0.5 to 1000 Hz

Microcontroller
ARM Cortex M0 with 32-bit 256 KB Flash,
reprogrammable on-board from USB

Data Storage
64 KB to 1024 KB

ENVIRONMENTAL

Operating Temperature
-10 to +50 °C

Storage Temperature
-20 to +70 °C

Maximum Humidity Before Condensation
85%

DISPLAY AND KEYBOARD

Display
6 digit, 7 segment, LED

Digit Height
14 mm

Keyboard
4 key capacitive keyboard

Weighing Instrument

ELECTRICAL**Voltage**12 to 24 \pm 15% VDC**Wattage**

5 W

INPUT AND LOGICS**Logic Input**

24 VDC (external voltage), 2 opto-isolated, PNP

Logic Output2 solid state relays
(maximum load 24 VDC/100 mA each)**ANALOG OUTPUT (OPTIONAL)****Output**

16 bit, opto-isolated

Tension0 to 5/10 V, (R min 10 k Ω)**Current**0/4 to 20 mA (R max 300 Ω)**Linearity**

<0.02% of full scale

Temperature Drift<0.001% of full scale $^{\circ}$ C**SERIAL COMMUNICATION****Serial Output #1**

1 RS232C

Baud Rate

2400 to 115200 (adjustable)

Serial Output #2

1 RS485

Baud Rate

2400 to 115200 (adjustable)

Serial Output #3

USB device interface

Serial Output #4 (Optional)

PROFINET interface

Serial Port #5 (Optional)

EtherCAT interface

Serial Port #6 (Optional)

DeviceNet interface

Serial Port #7 (Optional)

Ethernet interface

Connection Speed

10 to 100 mbps

ENCLOSURES**Dimensions**

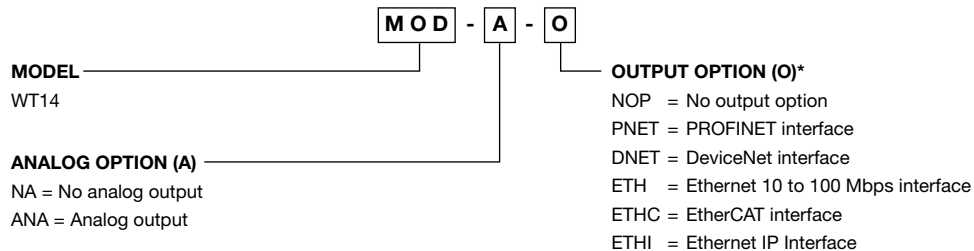
106 x 108 x 62 mm, L x H x D

Mounting

DIN Rail

Electrical Connections

5 mm removal terminal blocks

APPROVALS**EN**EN61000-6-2, EN61000-6-3 for EMC; EN61010-1
for electrical safety**ORDERING INFORMATION FOR WT14****Example Completed Part Numbers:**

WT14-NA-ETH is the part number for a WT14 with no analog output but comes with an Ethernet 10 to 100 mbps interface.

WT14-ANA-DNET is the part number for a WT14 with an analog output and a DeviceNet interface.

***This is mandatory: customers must select an output option.**

All specifications subject to change without notice. For inquiries within Italy please contact the VPG Transducers Marketing Department directly using the email address vpgt.marketing@vpgsensors.com.

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