

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

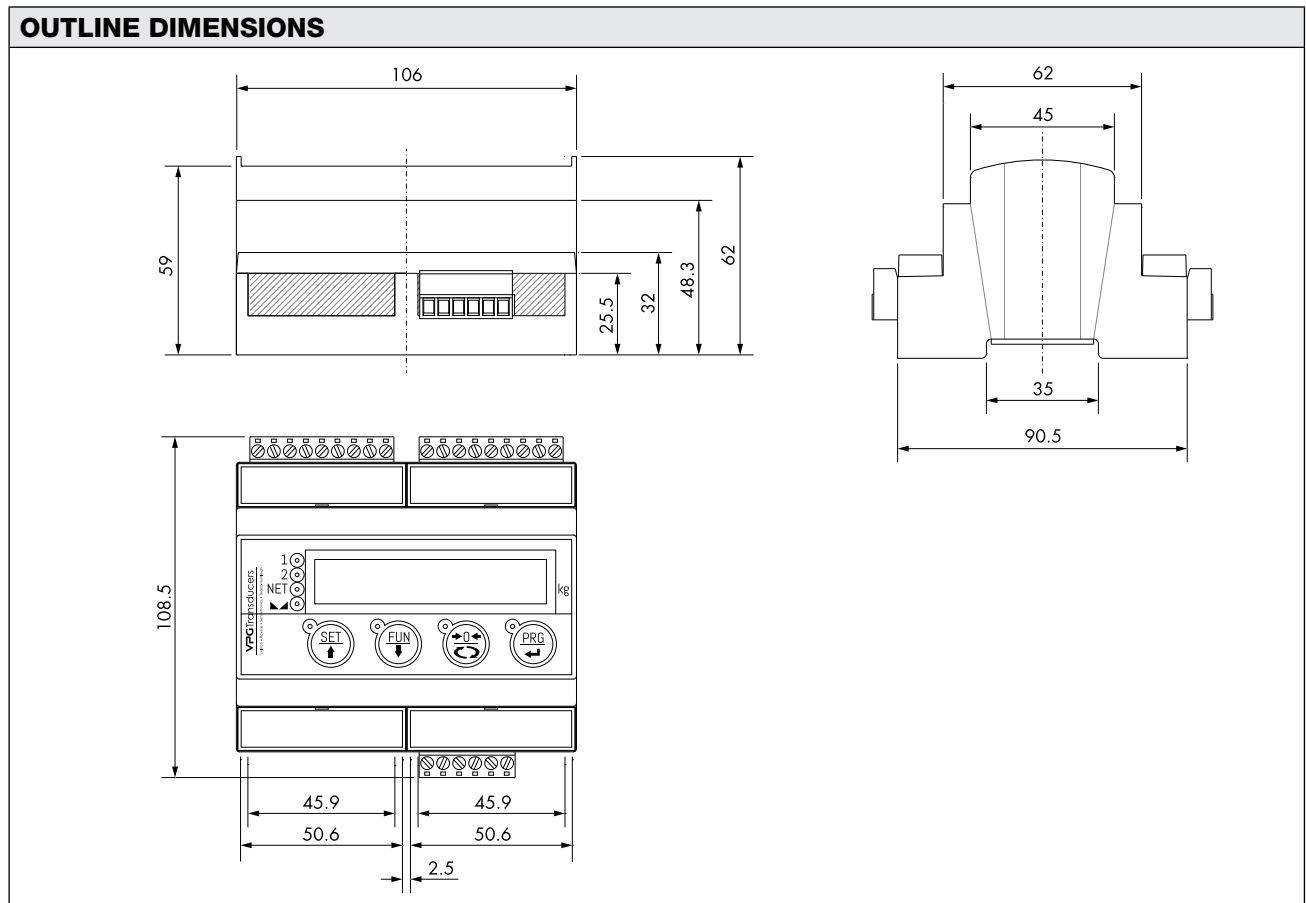
- Various industrial systems



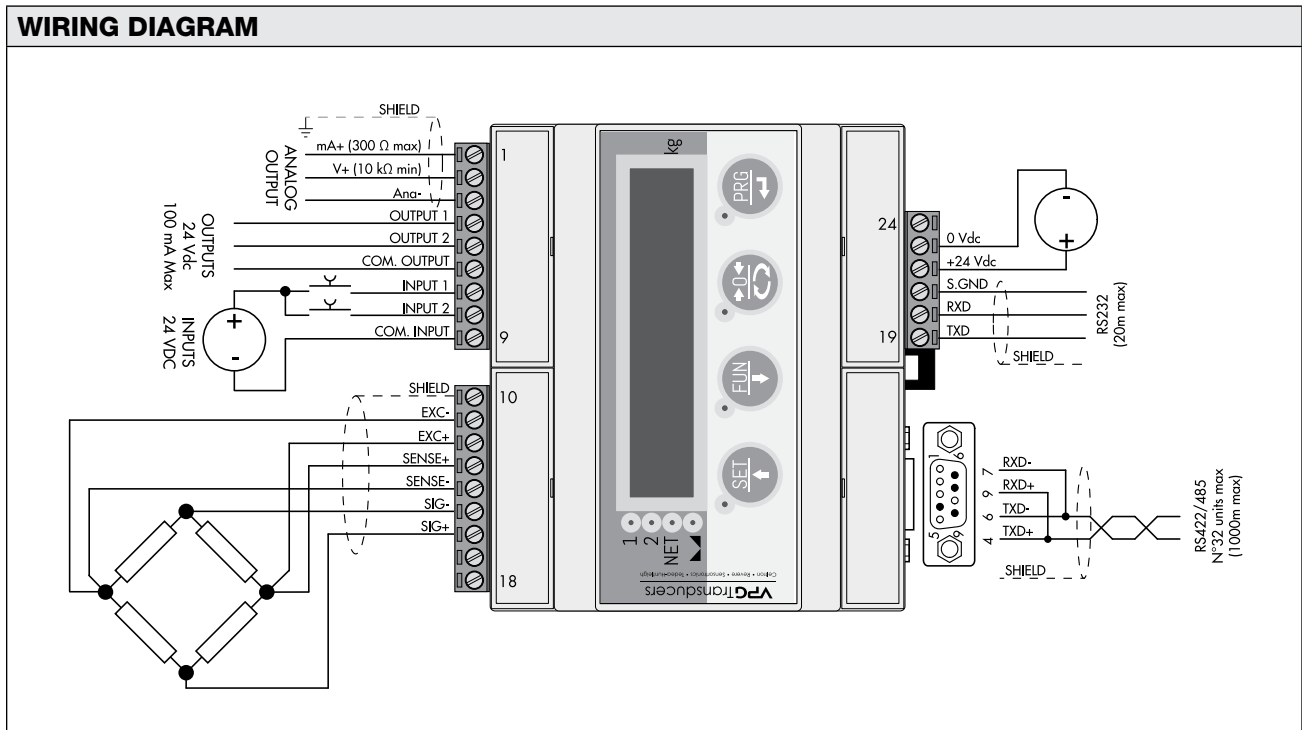
DESCRIPTION

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



SPECIFICATIONS

PERFORMANCE

Power Output
5 V

Measuring Range
-3.9 to +3.9 mV/V

Input Sensitivity
0.02 μV/division

Linearity
<0.01% of full scale

Temperature Drift
<0.001% of full scale °C

D/A Convertor
24 bit

Maximum Load Cells
8 at 350 Ω

Frequency Signal Acquisition
12 to 1000 Hz

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 ±15% VDC

Wattage
5 W

INPUT AND LOGICS

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

Logic Output
2 solid state relays
(maximum load 24 VDC/100 mA each)

ANALOG OUTPUT (OPTIONAL)

Output
16 bit, opto-isolated

Tension
0 to 5/10 V, (R min 10 kΩ)

Current
0/4 to 20 mA (R max 300 Ω)

Linearity
<0.02% of full scale

Temperature Drift
<0.001% of full scale °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

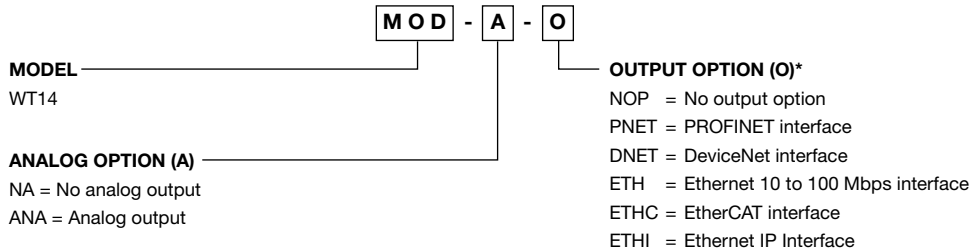
Mounting
DIN Rail

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.