

# Weight Indicator

## FEATURES

- High performance and long-term reliability
- Assembly “snap-on” DIN rail (certified to EN50022 standards)
- Able to interface with intrinsically safe barriers for use in hazardous areas

## OPTIONS

- Analog option available
- RS485 full duplex output available

## APPLICATIONS

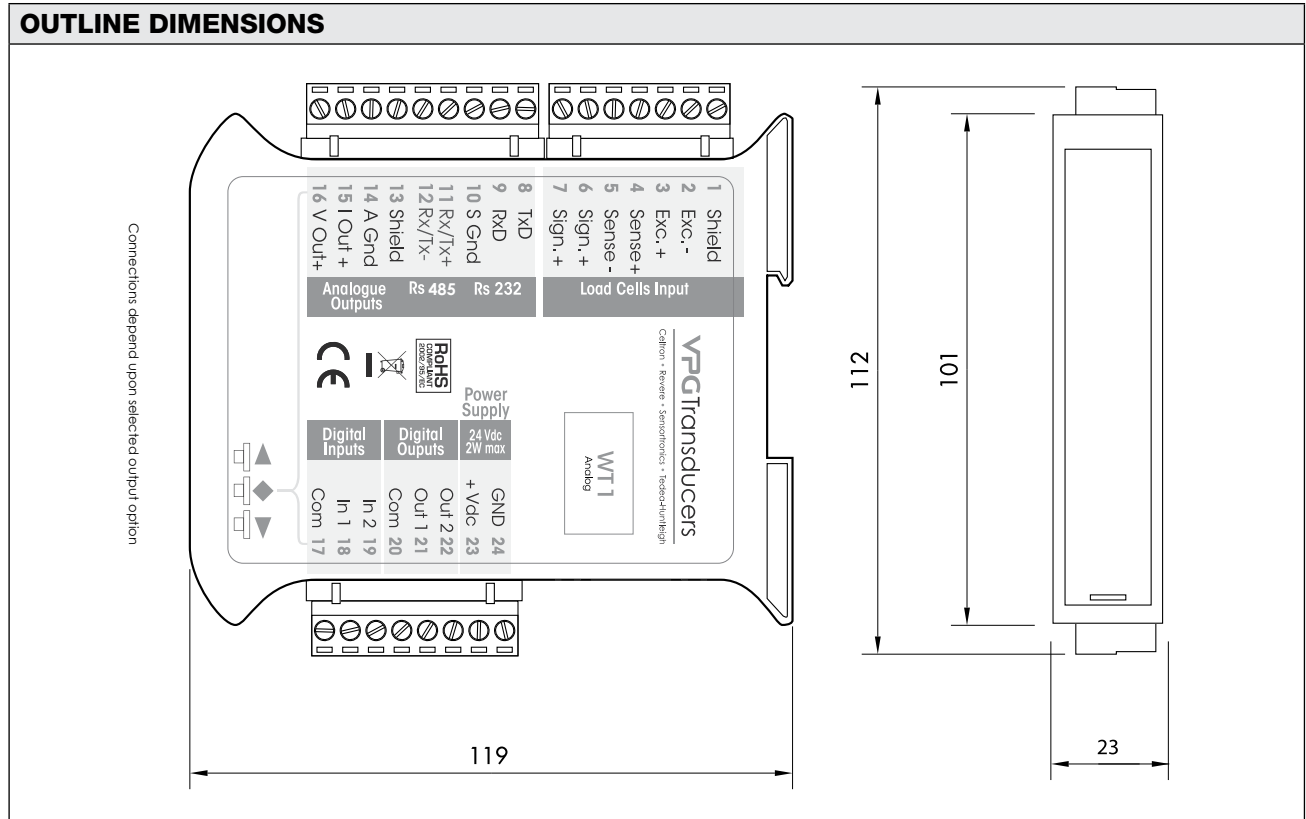
- Various industrial systems

## DESCRIPTION

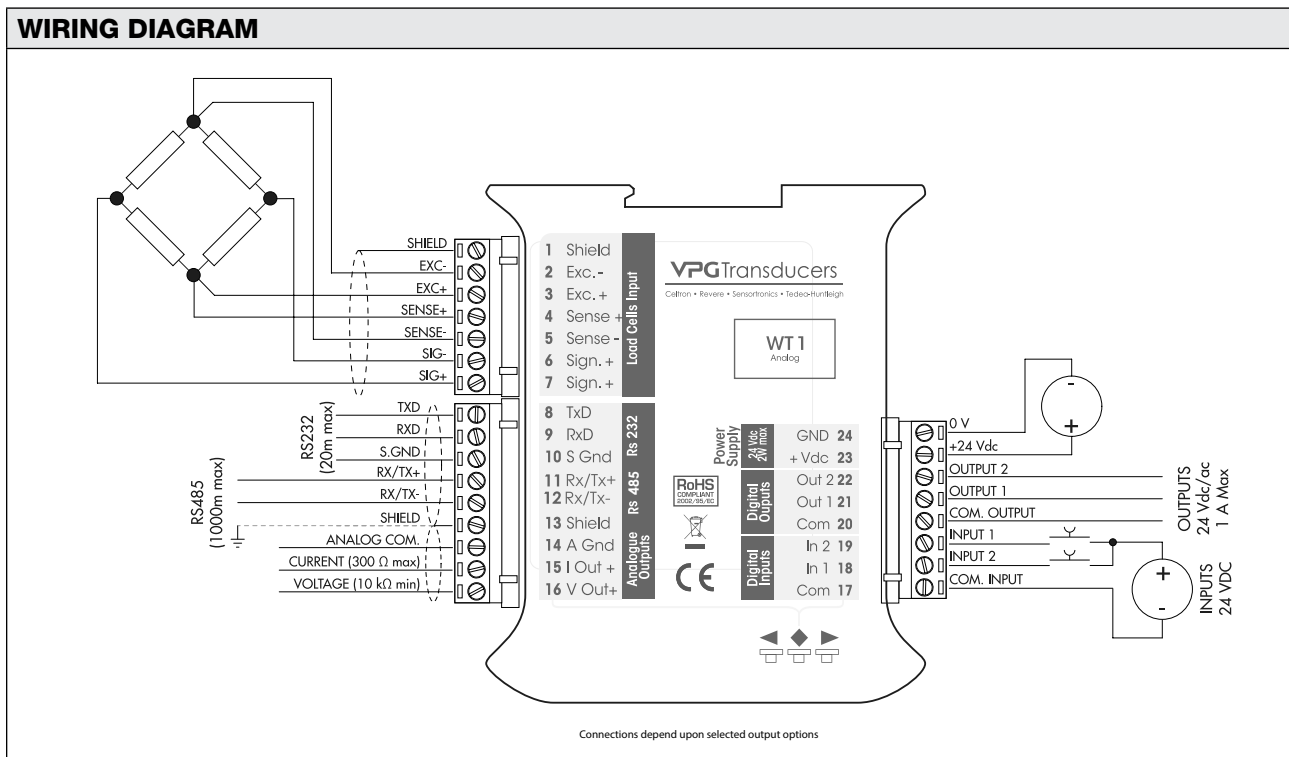
The WT1 provides accurate readings at an excellent price. When connected to a system of 1–4 load cells, the WT1 will convert output signals into stable, accurate weight values. This model comes with two logic outputs and two logic inputs as standard. The WT1 can be fitted with either an RS232C half-duplex or RS485 full duplex serial door; both serial doors can be loaded with ASCII or Modbus RTU protocols to enable communication with a PC or PLC.



## OUTLINE DIMENSIONS



Weight Indicator



**SPECIFICATIONS**

**PERFORMANCE**

**Power Output**  
4 V

**Measuring Range**  
-4 to +4 mV/V

**Input Sensitivity**  
0.02 μV/division

**Linearity**  
<0.01% of full scale

**Gain Drift**  
<0.001% of full scale °C

**D/A Convertor**  
24 bit

**Maximum Load Cells**  
4 at 350 Ω

**Internal Resolution**  
16,000,000 counts

**Visible Resolution**  
60,000 counts (visible on net weight)

**Divisions Value (Adjustable)**  
0.001 to 50

**Filter (Adjustable)**  
0.2 to 25 Hz

**ENVIRONMENTAL**

**Operating Temperature**  
-10 to +50 °C

**Storage Temperature**  
-20 to +60 °C

**DISPLAY AND KEYBOARD**

**Display**  
5 digit, 7 segment, LED

**Digit Height**  
7 mm

**Keyboard**  
3 key mechanical keyboard

**ELECTRICAL**

**Voltage**  
24 ±10% VDC

**Wattage**  
2 W

**INPUT AND LOGICS**

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

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

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**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**  
<0.03% of full scale
- Temperature Drift**  
<0.002% full scale °C

**ENCLOSURES**

- Dimensions**  
119 x 112 x 23 mm, L x H x D
- Mounting**  
DIN rail
- Electrical Connections**  
5.08 mm terminal screw pass

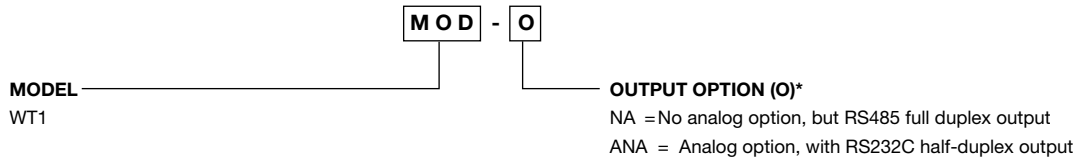
**APPROVALS**

- EN**  
EN61000-6-2, EN61000-6-3 for EMC;  
EN61010-1 for electrical safety

**SERIAL COMMUNICATION**

- Serial Output #1**  
RS485 full duplex with ASCII or Modbus RTU protocol
- Baud Rate**  
2400 to 115200 (adjustable)
- Serial Output #2 (with Analog Output option)**  
RS232C half duplex with ASCII or Modbus RTU protocol
- Baud Rate**  
2400 to 115200 (adjustable)

**ORDERING INFORMATION FOR WT1**



**Example Completed Part Numbers:**  
 WT1-ANA is the part number for a WT1 with the analog and RS232C outputs.  
 WT1-NA is the part number for a WT1 with the RS485 output only.  
**\*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](mailto:vpgt.marketing@vpgsensors.com).

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