

Weighing Transmitter WT05

FEATURES

- Suitable for use in any industrial weighing system, ideal for both regulation and supervision tasks.
- Supports systems with up to 8 load cells, offering practical, fast, and flexible operation.
- Field and remote fault diagnostics, emulation of faulty cells with exclusion from the weighing system, and automatic recalibration of new load cells.
- Configurable via dedicated PC software or directly from the Master using the communication protocol.
- VTW PC software for enhanced configuration and management.
- Removable terminal blocks for convenient electrical connections.



OPTIONS

- Analogue output or additional data handling capabilities
- Alibi memory option for increased data storage capacity.
- Multiple fieldbus protocols available for versatile network integration.



APPLICATIONS

- Industrial Systems: Ideal for a variety of industrial applications requiring accurate and reliable weighing solutions.

DESCRIPTION

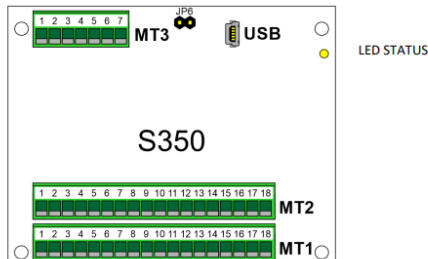
The Model WT05 is a high-quality weighing indicator designed to meet the demands of diverse industrial applications. Its compact and practical design makes it easy to integrate into existing systems.

The WT05 is equipped with a four-button keyboard for straightforward access to configuration and calibration functions. It includes standard RS232 and RS485 serial ports, as well as a USB device port for enhanced connectivity. Additionally, the WT05 can be equipped with various fieldbus options through an external module, ensuring compatibility with most supervision devices available on the market.

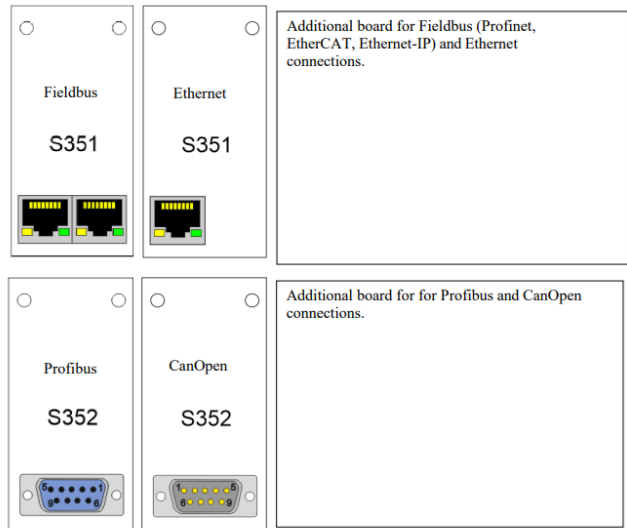
Weighing Instrument WT05

WIRING DIAGRAM

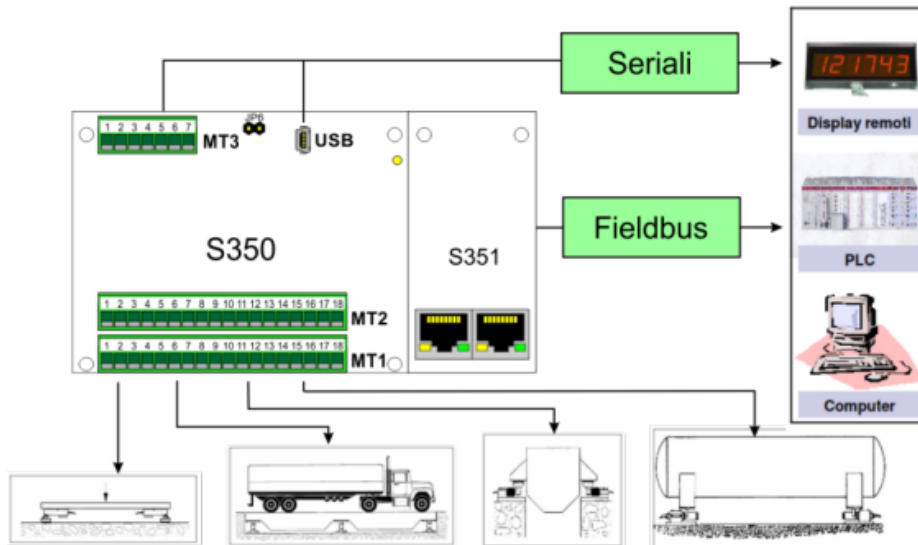
POWER SUPPLY CONNECTIONS, SERIALS USB AND LOAD CELLS



FIELDBUS CONNECTIONS



MT1 (Cells 1-4)	MT2 (Cells 5-8)	MT3 (Pwr supply / Serials)
1 + Pwr supply (5V)	1 + Pwr supply (5V)	1 + 12/24 VDC
2 + Signal Cell 1	2 + Signal Cell 5	2 GND
3 - Signal Cell 1	3 - Signal Cell 5	3 GND
4 GND	4 GND	4 TX RS232
5 + Pwr supply (5V)	5 + Pwr supply (5V)	5 RX RS232
6 + Signal Cell 2	6 + Signal Cell 6	6 + RS485
7 - Signal Cell 2	7 - Signal Cell 6	7 - RS485
8 GND	8 GND	
9 + Reference (C1-C4)	9 + Reference (C5-C8)	
10 - Reference (C1-C4)	10 - Reference (C5-C8)	
11 + Pwr supply (5V)	11 + Pwr supply (5V)	
12 + Signal Cell 3	12 + Signal Cell 7	
13 - Signal Cell 3	13 - Signal Cell 7	
14 GND	14 GND	
15 + Pwr supply (5V)	15 + Pwr supply (5V)	
16 + Signal Cell 4	16 + Signal Cell 8	
17 - Signal Cell 4	17 - Signal Cell 8	
18 GND	18 GND	



SPECIFICATIONS

PERFORMANCE

Excitation Voltage
5 V

Measuring Range
-3.9 to +3.9 mV/V

Input Sensitivity
0.02 μ V/division

Full scale non-Linearity
<0.01% of full scale

Temperature Drift
<0.003% FS/ °C

Gain Drift
<0.0003% FS/ °C

A/D Converter
24 bits

Maximum Load Cells
16 at 350 Ω

Internal Resolution
>than 8,000,000 divisions

Visible Resolution (in divisions)
999,999

Digital Filter (Adjustable)
0.25 to 25 Hz

Signal acquisition frequency
25 to 400 Hz (4 load cells)

Microcontroller

32bit ARM Cortex M0+, 128KB Flash reprogrammable
onboard from USB Data Storage

4 KB

Serial port

1 USB-C device + 1 RS232C and 1 RS485

ENVIRONMENTAL

Operating Temperature
-10 to +50 °C (max humidity 85% without mist)

Storage Temperature
-20 to +70 °C

Weighing Instrument WT05

ELECTRICAL

Power supply
 12-24 ±15% VDC
 Power consumption
 3 W

SERIAL COMMUNICATION

Serial Output #1
 1 RS232 half duplex

Serial Output #2
 1 RS485 half-duplex

Serial Output #3
 USB device interface

Optional Fieldbus
 ETHERNET 10/100 (with TCP,
 MODBUS/TCP, UDP, IP,
 ICMP, ARP protocols); PROFIBUS DP;
 PROFINET.
 ETHERNET/IP; ETHERCAT; CANOPEN

Ethernet Protocols
 TCP, Modbus/TCP, UDP, IP, ICMP, ARP.
 Web server integrated.

ENCLOSURES

Dimensions

Standard: 98 x 90 x 40 mm (L x H x P)

With Fieldbus: 134 x 90 x 40 mm (L x H x P)

Mounting

With 4 screws or on support for DIN bar or OMEGA bar

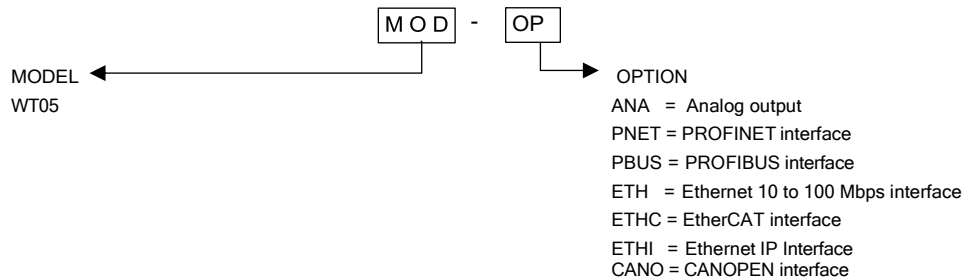
Electrical Connections

Removable screw terminal, 3.81mm pitch

REGULATORY COMPLIANCE

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

ORDERING INFORMATION FOR WT05



Example Completed Part Numbers:

WT05-ETH is the part number for a WT05 with an Ethernet interface

WT05-ANA is the part number for a WT05 with an analog output

*This is mandatory: customers must select an output option

All specifications subject to change without notice. For inquiries, please contact the VPG Force Sensors Marketing Department directly using the email address vpqfs.marketing@vpqfsensors.com.