TEKEMAS

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

- Ethernet version available
- RS485 full duplex output available
- PROFINET version available

APPLICATIONS
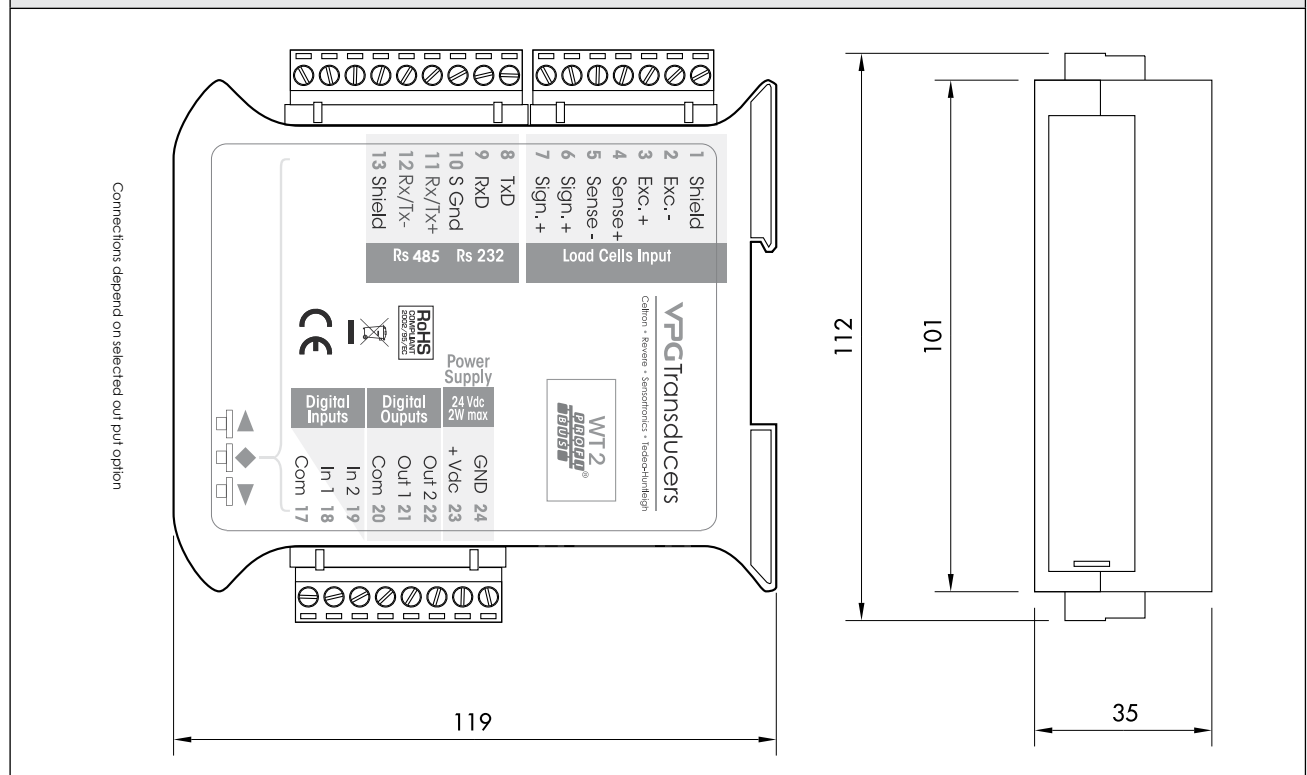
- Various industrial systems

DESCRIPTION

The WT2 is a modified version of the WT1 with improved interfacing abilities. It uses the same 24-bit D/A converter and, when connected to a system of 1–4 load cells, the WT2 converts output signals in the same manner as the WT1. The WT2's strength is in its connectivity. It uses PROFIBUS as its default protocol, which is faster than the MODBUS protocol and able to control more complex systems. The WT2 also features an optional Ethernet connection, which comes with a 128-byte in/out buffer for high-speed PC connections. The Ethernet cable can be augmented with the PROFINET protocol, which enables full integration into systems with that protocol.
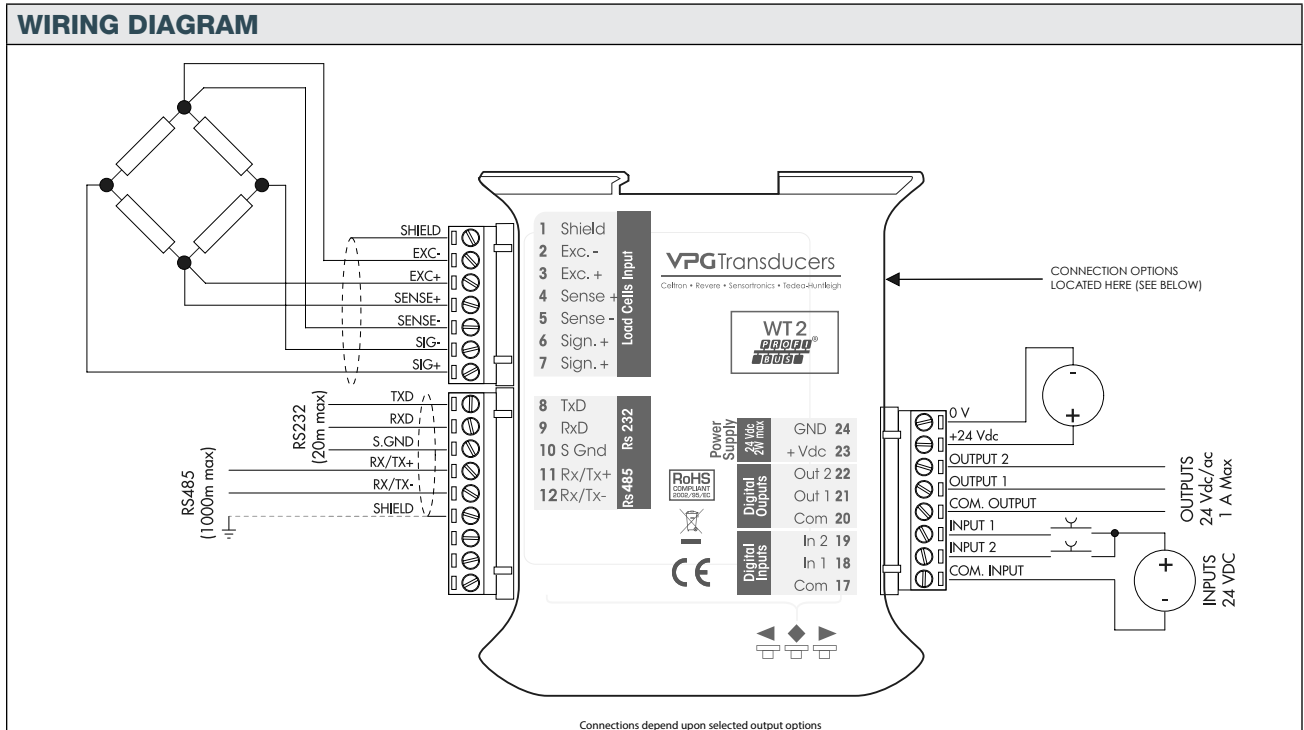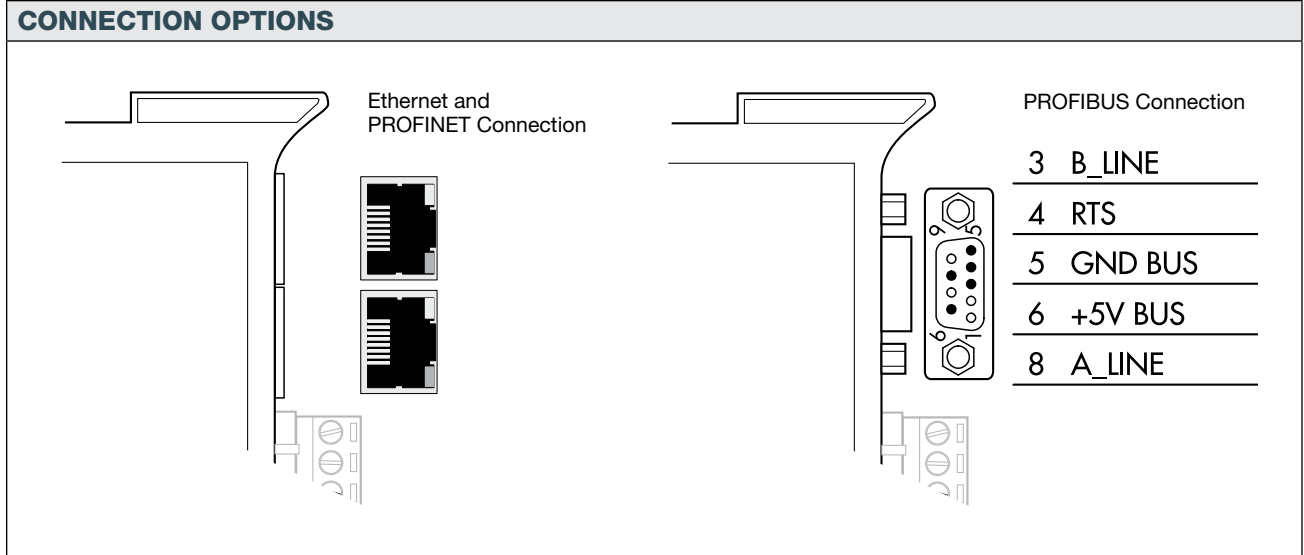
OUTLINE DIMENSIONS

Tekemas A/S ◆ Afd. Øst. Naverland 2, 2600 Glostrup ◆ Afd. Vest. Nydamsvej 45, 8362 Hørning ◆ Tel +45 3670 6000
Tekemas AB ◆ Varlabergsvägen 16F, 434 39 Kungsbacka ◆ Sweden ◆ www.tekemas.com ◆ tekemas@tekemas.com

1

TEKEMAS

VPGTransducers
Celtron • Revere • Sensortronics • Tedea-Huntleigh

Weight Indicator

WIRING DIAGRAM

	Load Cells Input
1	Shield
2	Exc. -
3	Exc. +
4	Sense +
5	Sense -
6	Sign. +
7	Sign. +

	Rs 232
8	TxD
9	RxD
10	S Gnd

	Rs485
11	Rx/Tx+
12	Rx/Tx-

SHIELD
EXC-
EXC+
SENSE+
SENSE-
SIG-
SIG+

TXD
RXD
S.GND
RX/TX+
RX/TX-
SHIELD

RS232 (20m max)
RS485 (1000m max)

VPGTransducers
Celtron • Revere • Sensortronics • Tedea-Huntleigh

WT 2
PROFI BUS

RoHS COMPLIANT 2002/95/EC

CE

Power Supply — 24 Vdc 2W max

Digital Outputs	
GND	24
+ Vdc	23
Out 2	22
Out 1	21
Com	20

Digital Inputs	
In 2	19
In 1	18
Com	17

CONNECTION OPTIONS LOCATED HERE (SEE BELOW)

0 V
+24 Vdc
OUTPUT 2
OUTPUT 1
COM. OUTPUT
INPUT 1
INPUT 2
COM. INPUT

OUTPUTS 24 Vdc/ac 1 A Max
INPUTS 24 VDC

Connections depend upon selected output options

CONNECTION OPTIONS

Ethernet and PROFINET Connection

PROFIBUS Connection

3	B_LINE
4	RTS
5	GND BUS
6	+5V BUS
8	A_LINE

TEKEMAS

VPGTransducers
Celtron • Revere • Sensortronics • Tedea-Huntleigh

Weight Indicator

SPECIFICATIONS

PERFORMANCE

Power Output
4 V

Measuring Range
−4 to +4 mV/V

Input Sensitivity
0.02 V/division

Linearity
<0.01% of full scale

Gain Drift
<0.001% full scale ˚C

D/A Convertor
24 bit

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

SERIAL COMMUNICATION

Serial Output #1
RS232C half duplex with ASCII protocol,

Baud Rate
2400 to 115200 (adjustable)

Serial Output #2 (optional)
PROFIBUS DP-V1

Baud Rate
9.6 K/sec to 12 Mbit/sec

Serial Output #3 (optional)
PROFINET

Baud Rate
According to PROFINET standards

Serial Output #4 (optional)
Ethernet

Buffer Dimensions
128 bytes in, 128 bytes out

ENCLOSURES

Dimensions
119 x 112 x 23 mm, L x H x D

Mounting
DIN rail

Electrical Connections
5.08 mm terminal screw pass,
D-Sub 9 poles female connector (Profibus version),
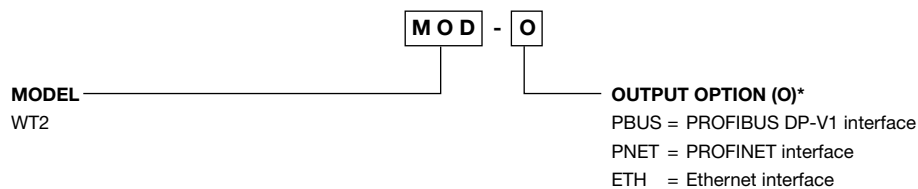RJ45 connector (Ethernet and Profinet connections)

APPROVALS

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

VPGTransducers
Celtron • Revere • Sensortronics • Tedea-Huntleigh

Weight Indicator

ORDERING INFORMATION FOR WT2

| M O D | - | O |

MODEL ——————————————
WT2

OUTPUT OPTION (O)*
PBUS = PROFIBUS DP-V1 interface
PNET = PROFINET interface
ETH = Ethernet interface

Example Completed Part Numbers:
WT2-ETH is the part number for a WT2 with an Ethernet interface.
***This is mandatory: customers must select an output option.**

All specifications subject to change without notice.

Tekemas A/S ◆ Afd. Øst. Naverland 2, 2600 Glostrup ◆ Afd. Vest. Nydamsvej 45, 8362 Hørning ◆ Tel +45 3670 6000
Tekemas AB ◆ Varlabergsvägen 16F, 434 39 Kungsbacka ◆ Sweden ◆ www.tekemas.com ◆ tekemas@tekemas.com

4

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Document No.: 63999 Revision: 15-Jul-2014

Tekemas A/S ◆ Afd. Øst. Naverland 2, 2600 Glostrup ◆	Afd. Vest. Nydamsvej 45, 8362 Hørning	◆	Tel +45 3670 6000
Tekemas AB ◆ Varlabergsvägen 16F, 434 39 Kungsbacka ◆	Sweden ◆ www.tekemas.com	◆	tekemas@tekemas.com

1