

Weight Controller/Indicator

FEATURES

- Inventory and batching control terminal
- High sample rate, up to 70 samples per second
- Up to two serial ports with printing and networking (one standard)
- Two opto-isolated weight setpoints
- Large 6 digit LED display
- Alibi (Flash) memory for last 10,000 transactions
- OIML R-76 approved to 10000d
- Panel mount IP40 enclosure
- Input power 24 VDC
- **Optional Features**
 - Analog output
 - IP54 front panel cover
 - RS-485 port
 - Second RS-232 port

APPLICATIONS

- Process weighing
- Inventory control



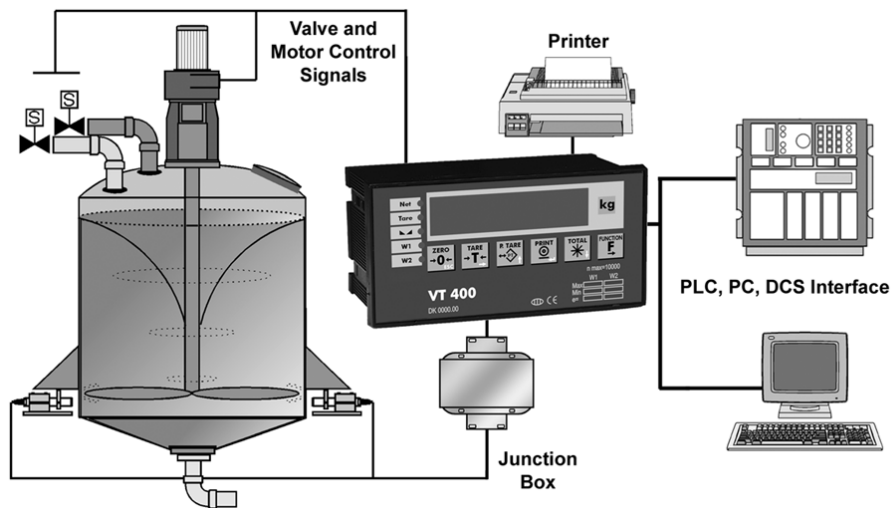
DESCRIPTION

VT 400 Weight Controllers provide weighing and control functions for industrial process systems.

Two opto-isolated control outputs, a choice of up to two serial interfaces (RS-232 and RS-485) and an analog output (optional) allow full communication with higher level PCs or PLCs. Up to 30 units can be interconnected through the RS-485 network.

The standard VT 400 panel mount enclosure is rated IP40. However, it can be upgraded with an IP54 front panel cover (optional).

CONFIGURATION



Weight Controller/Indicator

SPECIFICATIONS

PERFORMANCE

Resolution

Selectable up to 990,000 dd

Conversion Speed

3–70 samples per second (selectable)

Sensitivity

0.4 $\mu\text{V}/\text{Vsi}$ for approved scales

0.1 $\mu\text{V}/\text{Vsi}$ for non-approved scales

Full Scale Range

–0.25 to 1.75 mV/V [–1.25 mV to 8.75 mV] or

–0.25 to 3.75 mV/V [–1.25 mV to 18.75 mV]

Linearity

0.002% of full scale

Long-Term Stability

0.005% of full scale per year

Excitation

+5V alternating polarity or +5 VDC (selectable), with sense (6 wires)

Number of Cells

Up to 10, 350 Ω load cells

Filter

FIR automatically adjusted to conversion speed, rolling average

Offset Drift

< 2 ppm/ $^{\circ}\text{C}$

Span Drift

< 2 ppm/ $^{\circ}\text{C}$

A/D Converter Type

Sigma-Delta, ratiometric

Count By

x1, x2, x5, x10, x50

Decimal Point

Between any digits of the weight display

Calibration Methods

Dead load and span, or data sheets calibration, via the mV/V output values of the load cell

Weighing Functions

Automatic zero tracking, motion detection, auto-zero on power-up, zero tare, multiple test functions

Memory Allocation

Calibration data EEPROM (32 kb), Flash tally-roll (Alibi) memory capable of 10,000 weight registrations (64 kb)

ENVIRONMENTAL

Operating Temperature

–10 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ to 104 $^{\circ}\text{F}$)

Storage Temperature

–10 $^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$ (–4 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)

Relative Humidity

40–90% RH, non-condensing

DISPLAY AND KEYBOARD

Display

6 digit, 7 segment, LED

Digital Height

14 mm [0.55 in.]

Status Enunciators

No motion, zero, tare in use, net, setpoint in operation

Weight Digits

4, 5 or 6 (setup selectable)

Keyboard

6 membrane keys, with tactile feedback

ELECTRICAL

Voltage

24 VDC

Current

500 mA

ISOLATED ANALOG OUTPUT (OPTIONAL)

Resolution

16 bit DAC

Voltage Output

0.02–10V

Current

0–20 mA or 4–20 mA

Linearity

0.01% (or better) of full scale

Thermal Stability

50 ppm/ $^{\circ}\text{C}$ typical

INPUTS AND OUTPUTS

(x1) Logic Input

9–24 VDC, negative common, opto-isolated to 2.5 kV

(x2) Logic Output

24 VDC \pm 10%, positive common, max current 100 mA, opto-isolated to 2.5 kV, programmable as weight setpoints

Weight Controller/Indicator

SERIAL COMMUNICATION**Serial Output #1**

RS-232, non-programmable

Baud Rate

2400 baud, full duplex

Applications

Continuous, print (on demand), alibi print

Serial Output #2

RS-232 or RS-485 setup programmable

Baud Rate

2400–57800 baud, half duplex

Applications

EDP and master-slave protocols, continuous output, remote printer, weight output

ENCLOSURE—HEAVY DUTY PLASTIC**Dimensions**144 x 72 x 132 mm L x H x D
[5.7 x 2.8 x 5 in. L x H x D]**Mounting**

Panel mount

Protection

IP40 standard, optional front panel cover—IP54

Wiring Connections

Mini D-type connectors

APPROVALS (ACCURACY CLASS III/IIIL)**OIML R-76**10000d single or dual interval
EU-type approval no. DK0199.62

VPG Transducers is continually seeking to improve product quality and performance. Specifications may change accordingly.

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.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.



LOADCELLS | PRESSURE SENSORS | ELECTRONICS
Meer en Duin 64b Phone : +31 (0)88-4224440
2163 HC Lisse Fax : +31 (0)88-4224441
The Netherlands Email : info@stekon.nl