

## 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



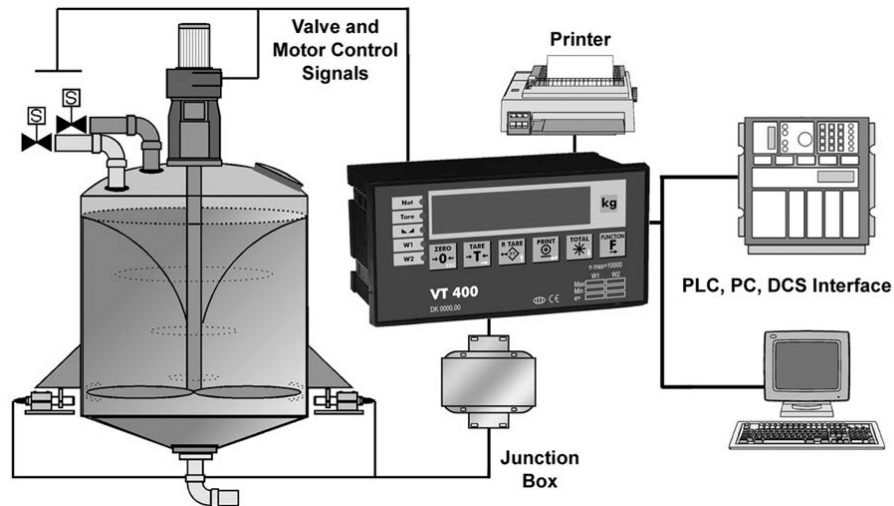
### DESCRIPTION

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 $\Omega$  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

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**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.

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