

### 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



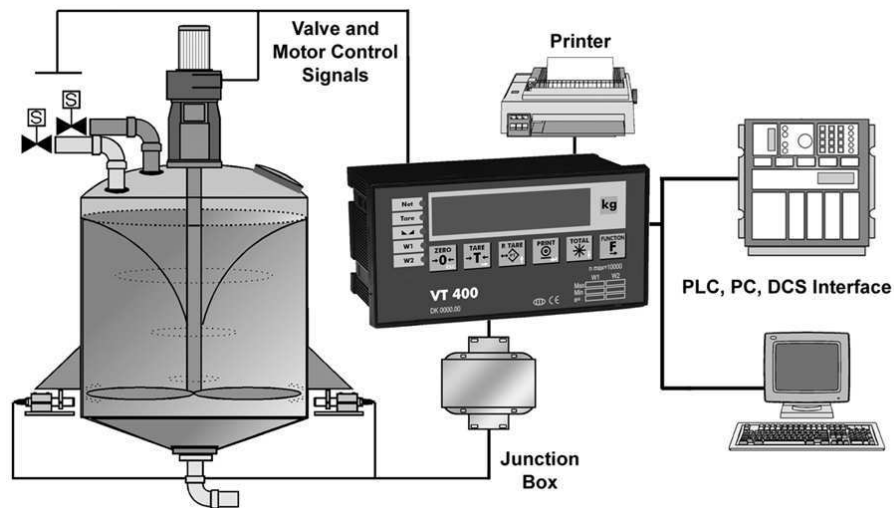
#### DESCRIPTION

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



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### 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

### 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

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