

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)
- Analog output (optional)
- Two opto-isolated weight setpoints
- Large 6 digit LED display
- Alibi (Flash) memory for last 10,000 transactions
- OIML R-76 and NTEP approved to 10,000d
- Panel mount IP40 enclosure
- Input power 24VDC
- IP54 front panel cover (optional)

DESCRIPTION

VT 400 Weight Controllers provide weighing and control functions for industrial batch/blend/mix process systems.

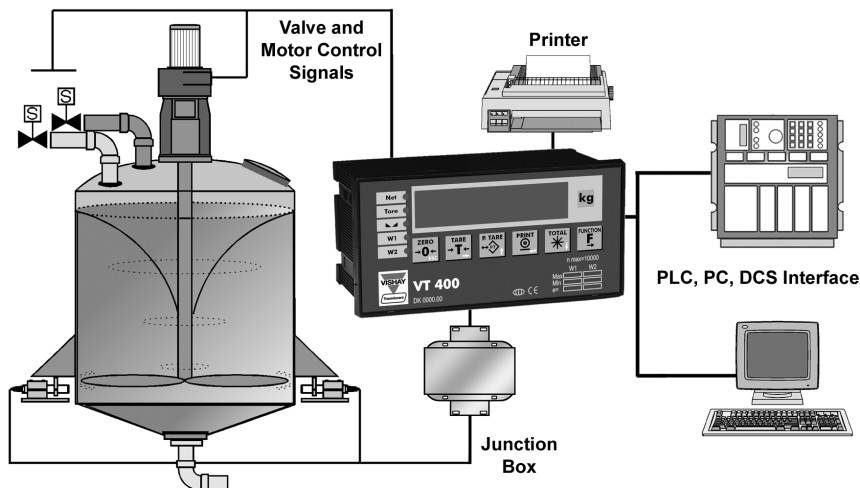
Two opto-isolated control outputs, a choice of up to two serial interfaces (RS-232 and RS-485) and an analog output (optional) allow full communication with higher level PCs or PLCs. Up to 30 units can be interconnected through the RS-485 network.

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

APPLICATIONS

- Process weighing
- Batch/blend/mix systems
- Inventory control

CONFIGURATION



ORDERING INFORMATION

Item Number	Description*
VT400-2100177	RS-232, 24 VDC powered
VT400-2100941	RS-232, analog output (0-20 mA, 4-20 mA, or 0-10V), 24 VDC powered
VT400-2100942	RS-232 and RS-485, 24 VDC powered
VT400-2100943	RS-232 and RS-485 ports, analog output (0-20 mA, 4-20 mA, or 0-10V), 24 VDC powered
VT400-2100130	RS-232, external 230VAC/9VDC powered
VT400-2100132	RS-232 and RS-485, analog output (0-20 mA, 4-20 mA, or 0-10V), external 230 VAC/9VDC powered

SPECIFICATIONS

PERFORMANCE

Resolution: selectable up to 99,000 dd
 Conversion Speed: 3 - 70 samples per second (selectable)
 Sensitivity: 0.4µV/Vsi for approved scales,
 0.1µV/Vsi for non-approved scales.
 Full Scale Range: -0.25 to 2mV/V [-1.25mV to -10mV] or
 -0.25 to 4mV/V [-1.25mV to -20mV]
 Linearity: 0.002% of full scale
 Long Term Stability: 0.005% of full scale per year
 Excitation: +5V alternating polarity or +5VDC
 (selectable), with sense (6 wires)
 Number of Cells: Up to 10, 350 ohm load cells
 Filter: FIR automatically adjusted to
 conversion speed, rolling average.
 Offset Drift: < 2ppm/°C
 Span Drift: < 2ppm/°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. Calibration
 of two analog inputs (optional) with
 individual coefficients.
 Weighing Functions: automatic zero tracking, motion
 detection, auto-zero on power-up,
 zero tare, multiple test functions.
 Memory Allocation: calibration data EEPROM (32kb), Flash
 tally-roll (Alibi) memory capable of
 10,000 weight registrations (64kb)

ENVIRONMENTAL

Operating Temp: -10 °C to +40 °C [14 °F to 104 °F]
 Storage Temp: -10 °C to +70 °C [-4 °F to 158 °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: 500mA

ISOLATED ANALOG OUTPUT (OPTIONAL)

Resolution: 16 bit DAC
 Voltage Output: 0.02-10V
 Current: 0-20mA or 4-20mA
 Linearity: 0.01% (or better) of full scale
 Thermal Stability: 50ppm/°C typical

INPUTS & OUTPUTS

(x1) Logic Input: 9-24 VDC, positive common,
 opto-isolated to 2.5KV.
 (x2) Logic Output: 24 VDC ± 10%, positive common, max
 current 100mA, opto-isolated to 2.5KV,
 programmable as weight setpoints

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

Stainless Steel Enclosure:
 Dimensions: 144x72x132 mm LxHxD
 [5.7x2.8x5 in. LxHxD]
 Mounting: panel mount
 Protection: IP40 standard, optional front panel
 cover - IP54
 Wiring Connections: mini D-type connectors

APPROVALS (ACCURACY CLASS III)

OIML R-76: 10,000d single or dual interval
 EU-type approval no. DK0199.62
 NTEP: 10,000d single or dual interval
 NTEP CC#

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