



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 process systems.

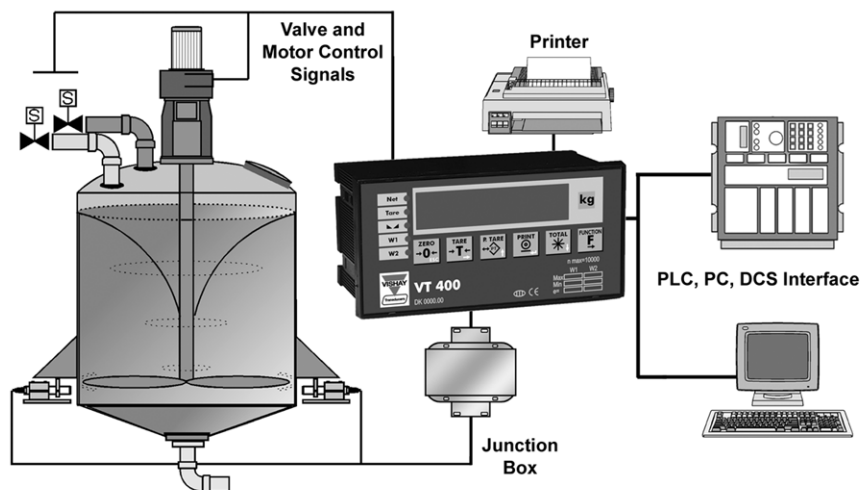
Two opto-isolated control outputs, a choice of up to two serial interfaces (RS-232 and RS-485) and an analog output (optional) allow full communication with higher level PCs or PLCs. Up to 30 units can be interconnected through the RS-485 network.

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
- Inventory control

CONFIGURATION



ORDERING INFORMATION

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

*all models feature an LED display and plastic panel mount housing

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:	14mm [0.55in.]
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:	24VDC
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:	9-24VDC, positive common, opto-isolated to 2.5KV.
(x2) Logic Output:	24VDC±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

Heavy duty plastic enclosure:	
Dimensions:	144x72x132mm LxHxD [5.7x2.8x5in. LxHxD]
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:	10,000d single or dual interval EU-type approval no. DK0199.62
NTEP:	10,000d single interval NTEP CC#

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

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