

## Weighing Controller



### FEATURES

- Process weighing control terminal
- Special control software available for hopper scales and bagging scales
- High sample rate, up to 228 conversions per second
- Four serial interface ports for printing and networking (RS-232/ RS-485) and one Centronics printer port
- Two analog outputs for PLC interface (optional)
- In-flight compensation capability
- Up to 16 opto-isolated setpoint outputs (16 standard)
- Up to 16 opto-isolated inputs (16 standard)
- 2x40 character VFD display and 9 digit LED weight display
- 33 keys, alphanumeric and functional keyboard
- Process parameters protected by password
- OIML R-76 and NTEP approved to 10,000d
- Panel mount, IP54 enclosure

### DESCRIPTION

The VT500 Weighing Controller is designed for automatic discontinuous weighing systems in bulk handling processes.

It offers high-accuracy, high speed weighing, extensive control capabilities, easy adaptation and optimization of the process parameters and powerful data management.

Connectivity to higher level system layers is supported by multiple analogue and dig-

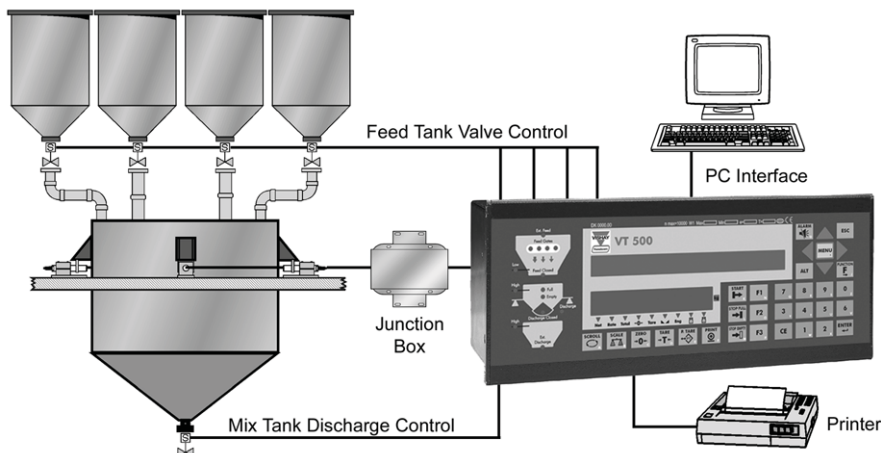
ital communications interfaces, including RS-485 networking capability.

A choice of one of two software packages can be ordered (factory installed) for the following applications: hopper scales and bagging scales.

### APPLICATIONS

- Bulk hopper scales
- Gross and net weighers
- Drum filling scales
- Bagging scales

### CONFIGURATION



### ORDERING INFORMATION

Item Number	Description*
VT500-21H0134	software for hopper scales
VT500-21B0134	software for bagging scales

\*all models feature two RS-232 ports, two RS-485 ports, one centronics port, and 16 digital inputs/outputs



### SPECIFICATIONS

#### PERFORMANCE

Resolution:	selectable up to 99,000 dd
Conversion Speed:	3 - 228 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, 500,000 internal counts
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, no motion detection, rate (kg/h) monitoring, zero tare, preset tare, net mode, multiple test functions.
Memory Allocation:	calibration data EEPROM
Real-Time Clock	

#### 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:	
Weight:	LED (red) 9 digit, 7 segment - 10mm high
Operator Dialog:	VFD 2x40 characters, 5 mm high
Status Enunciators:	net mode, rate, total, zero, tare, no motion, scale in use
Weight Digits:	4, 5 or 6 (setup selectable)
Keyboard:	alphanumeric membrane, 33 keys, with tactile and acoustic feedback

#### ELECTRICAL

Voltage:	85 – 265VAC
Current:	20VA max

#### ISOLATED ANALOG OUTPUT (OPTIONAL)

Two opto-isolated channels, voltage or current, hardware selectable	
Resolution:	12 bit DAC
Voltage Output:	0.05 - 10V into 1K ohm load
Current:	0-20mA or 4-20mA, max load 500 ohm
Accuracy:	0.03% max
Thermal Stability:	50ppm/°C typical
Total Output Error:	0.05% (at 20mA) @ 25°C

#### INPUTS & OUTPUTS

Logic Input:	up to 16, 24VDC±20% positive common, opto-isolated to 2.5KV.
Logic Output:	up to 16, 24VDC±10% positive common, max current 200mA

#### SERIAL COMMUNICATION

Serial Output #1:	RS-232
Baud Rate:	600-19200, full duplex, RTS/CTS control
Serial Output #2:	RS-485
Baud Rate:	600-19200, half duplex, Tx enable control
Serial Output #3:	RS-232
Baud Rate:	600-19,000, full duplex, RTS/CTS control
Serial Output #4:	RS-485A
Baud Rate:	600-19,000, full duplex
Parallel Port:	printer output, centronics type

#### ENCLOSURE

Panel Mount Dimensions:	305x132x137mm LxHxD [12x5x5.4in. LxHxD]
Panel Cutout:	293x118mm [11.5x4.6in.]
Protection:	IP54 for front panel
Wiring Connections:	D-type

#### APPROVALS (ACCURACY CLASS III)

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

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