Model VT 300D

Revere

VPG force sensors
Celtron • Revere • Sensortronics • Tedea-Huntleigh

Weighbridge Indicator for Digital and Analog Load Cells

FEATURES

- Supports digital and analog load cells
- Easy calibration when used with digital load cells
- Easy digital corner compensation
- Elaborated diagnostics of digital weighbridge load cells
- Easy service and maintenance
- Large, 16-character LCD display
- 27-key keyboard featuring alphanumeric and function keys
- Up to three serial ports with printing and networking
- Analog output for PLC interface (optional)
- Two opto-isolated weight setpoints
- Alibi (Flash) memory for transaction records
- Real-time clock
- Stainless steel enclosure (IP65), aluminum enclosure (IP40)
- Weighing and counting operating modes
- OIML R-76 approved to 10,000d
- Dual scale operation (one digital, one analog)
- 4 programmable ticket formats
- **Optional**
  - Analog output for PLC interface
  - Second RS232 print port (for aluminum version only)
  - PS2 keyboard interface (for aluminum version only)

APPLICATIONS

- Weighbridges
- Inventory control
- Industrial weighing systems
- Bench, floor, and counting scales



DESCRIPTION

The Model VT300D is a powerful alphanumeric terminal, designed for digital and analog weighbridges, inventory control, and other demanding weighing applications.

The extended keyboard includes alphanumeric and function keys for easy data entry and setup.

A 16-character dot-matrix LCD display supports the required user interface in complex industrial applications.

Using a weighing system that includes the Model VT 300D together with VPG Force Sensors digital load cells (DSC, SCC, SBC and MDBD) enables very easy installation, calibration, corner compensation, maintenance and diagnostics of the system.

The Model VT 300D's software manages various transactions allowing choices of customer, material type, or truck identification. Records of all activities are maintained in the indicator's memory and made available for computer reporting. Printable tickets and reports are easily formatted and edited.

The Model VT 300D can support one digital load cells weighbridge and one analog load cell weighbridge at same time.

Enclosure selections include tilted, wall-mount, and desktop.

See next page for further data.

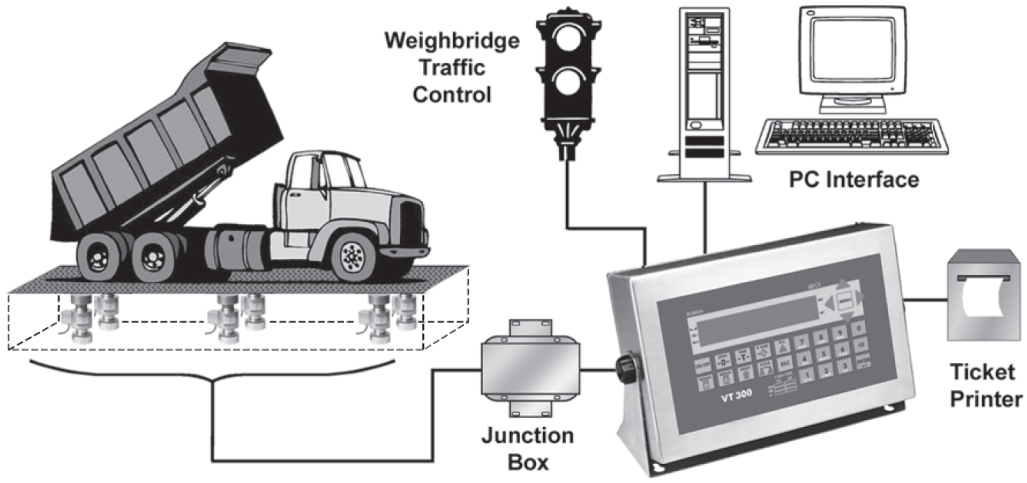
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CONFIGURATION



SPECIFICATIONS

PERFORMANCE

Analog Load Cell Interface Performance

Resolution
Selectable up to 990,000 dd

Conversion Speed
3–228 samples per second (selectable)

Sensitivity
0.4 µV/Vsi for approved scales,
0.1 µV/Vsi for non-approved scales

Full Scale Range
–0.25 to 1.75 mV/V or –0.25 to 3.75 mV/V

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; 350Ω load cells

Filter
FIR automatically adjusted to conversion speed, rolling average.

Offset Drift
≤2 ppm/°C

Span Drift
≤2 ppm/°C

A/D Converter Type
Sigma-Delta, ratiometric, 550,000 internal counts

Digital Load Cell Interface Performance

Resolution
Selectable up to 990,000 dd

Update Rate
25 updates per second

Supply to Load Cell
14–18 VDC; 1.5A (Standard 15V)

Number of Cells
Up to 12

Compatible Load Cells
DSC, SCC, SBC, MDBD

General Performance

Count By
x1, x2, x5, x10, x50, x100, x200

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. Digital corner correction. Digital default calibration.

Weighing Functions
Automatic zero tracking, no motion detection, auto-zero on power-up, zero tare, preset tare, net mode, multiple test functions.

Memory Allocation
Calibration data EEPROM, flash tally-roll (Alibi) memory capable of 10,000 weight registrations, 250 records database (trucks). Stores the digital load cell performance and calibration data.

Piece Counting Mode
Real-Time Clock

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ENVIRONMENTAL

Operating Temperature
–10°C to +40°C [14°F to 104°F]

Storage Temperature
–10°C to +70°C [–4°F to 158°F]

Relative Humidity
40–90% RH, non-condensing

DISPLAY AND KEYBOARD

Display
16-character, LCD, backlit

Digital Height
14.5 mm

Status Enunciators
No motion, zero, tare in use, net, scale in operation (#1 or #2 or sum # 1+2, if second scale connected), piece counting mode

Weight Digits
4, 5 or 6 (setup selectable)

Keyboard
Pseudo-alphanumeric, 27 keys, with tactile feedback

ELECTRICAL

Voltage
85–265 VAC

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% of full scale

Thermal Stability
50 ppm /°C typical

INPUTS AND OUTPUTS

(x1) Logic Input
9–24 VDC, negative common, opto-isolated to 2.5 kV

(x2) Logic Output
24 VDC ±10%, positive common, max current 100 mA, opto-isolated to 2.5 kV.

SERIAL COMMUNICATION

Serial Output #1
RS232 Full duplex, programmable

Baud Rate
1200-9600 baud, full duplex

Applications
Printer output, weight output

Serial Output #2
RS-485 setup programmable

Baud Rate
2400-115200 baud, half duplex

Applications
EDP output, master-slave protocols, continuous output, remote printer and digital load cell communication.

Serial Output #3
RS232PRN' programmable

Baud Rate
2400-115200

Applications
Printer output

ENCLOSURE

Stainless Steel Enclosure

Dimensions
252 x 152 x 62 mm L x H x D

Mounting
Wall and tilt mount

Protection
IP65

Wiring Connections
Cable glands

Aluminum Enclosure

Dimensions
194 x 100 x 107 mm L x H x D

Mounting
Desktop

Protection
IP40

Wiring Connections
D-sub connectors

APPROVALS (ACCURACY CLASS III)

OIML R-76
10,000d single or dual interval
EU-type approval no. 0200-NAWI-03996

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