

Weighbridge Weigh Indicator

FEATURES

- Specially designed as a weighbridge terminal
- Large, 16-character LCD display
- 27 key alphanumeric and functions keyboard
- Up to two serial ports with printing and networking (one standard)
- Two opto-isolated weight setpoints
- Alibi (Flash) memory and programmable database of transaction records
- Real-time clock
- Stainless steel enclosure (IP65), aluminum enclosure (IP40)
- Weighing and counting operating modes
- OIML R-76 approved to 10000d
- 4 programmable ticket formats
- **Optional**
 - Aluminum enclosure
 - Stainless steel enclosure
 - Dual scale operation (optional)
 - UL/TUV/UK/China/Japan plug
 - Second RS-232 port
 - RS-485 port
 - Analog input
 - Analog output for PLC interface
 - Battery (for aluminum only)

APPLICATIONS

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



DESCRIPTION

The VT 300 is a powerful alphanumeric terminal, designed for weighbridges, inventory control, and other demanding weighing applications.

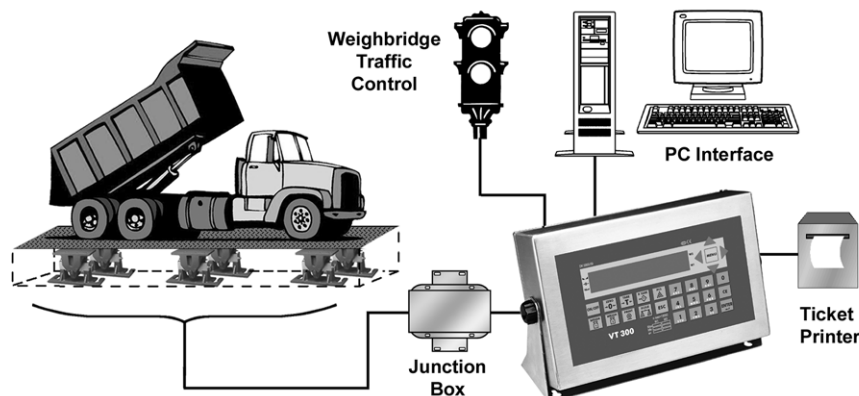
The extended keyboard includes alphanumeric and functional keys for easy data entry and setup.

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

VT 300 software manages various transactions allowing choices of customer, material type, or truck identification. Documented records of all daily activities are maintained in memory and made available for computer reporting. Printable tickets and reports are easily formatted and edited.

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

CONFIGURATION



Weighbridge Weigh Indicator

SPECIFICATIONS

PERFORMANCE

Resolution

Selectable up to 990000 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 Ω 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, 550,000 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. Calibration
of two analog inputs (optional) with individual
coefficients

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)

Piece Counting Mode**Real-Time Clock**

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

16 character, LCD, backlit

Digital Height

14.5 mm [0.57 in.]

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

Battery Operation (Optional)

Internal rechargeable battery, 6V/3Ah (aluminum
version only)

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/ $^{\circ}\text{C}$ 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

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SERIAL COMMUNICATION

Serial Output #1

RS-232, non-programmable

Baud Rate

2400 baud, full duplex

Applications

Printer output, Weight output

Serial Output #2 (optional)

RS-232 or RS-485 setup programmable

Baud Rate

2400–57800 baud, half duplex

Applications

EDP output, master-slave protocols, continuous output, remote printer

ENCLOSURES

Stainless Steel Enclosure

Dimensions

252 x 152 x 62 mm L x H x D
[10 x 6 x 2.5 in. 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
[7.64 x 3.94 x 4.21 in. L x H x D]

Mounting

Desktop

Protection

IP40

Wiring Connections

D-sub connectors

APPROVALS (ACCURACY CLASS III)

OIML R-76

10000d single or dual interval
EU-type approval no. DK0199.62

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