

## 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.

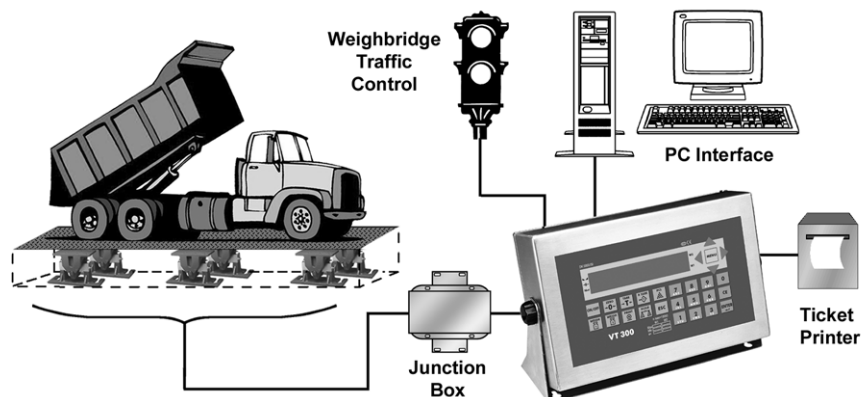
The extended keyboard includes alphanumeric and functional keys for easy data entry and setup.

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 $\Omega$  load cells

###### Filter

FIR automatically adjusted to conversion speed,  
rolling average.

###### Offset Drift

$\leq 2$  ppm/ $^{\circ}\text{C}$

###### Span Drift

$\leq 2$  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

## Weighbridge Weigh Indicator

**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

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