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 and NTEP 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.

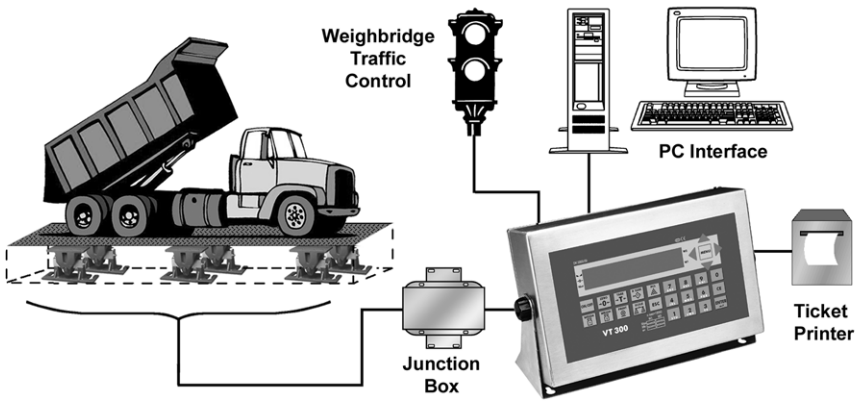
The extended keyboard includes alphanumeric and functional keys for easy data entry and setup.

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 µV/Vsi for approved scales,
0.1 µV/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; 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

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°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 [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/°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

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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

NTEP
10000d single or dual interval
NTEP CC# .....

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