

Weight Indicator

FEATURES

- Large 6 digit LED (VT 200) or LCD (VT 220) display
- Built-in weighing and counting modes
- Two opto-isolated setpoints
- Alibi (Flash) memory retains the last 10,000 transactions
- Two serial ports for printing and networking (one standard)
- Stainless steel enclosure (IP65), aluminum enclosure (IP40)
- Programmable ticket format
- High sample rate—up to 228 conversions per second
- OIML R-76 approved to 10000d
- Battery operation (optional with aluminum enclosure)
- **Optional**
 - Aluminum enclosure
 - Stainless steel enclosure
 - Dual scale operation
 - UL/TUV/UK power adapter
 - LED/LCD display
 - Analog input
 - Analog output
 - Second RS-232 port
 - RS-485 port
 - Real-time clock
 - Battery (for aluminum versions only)
 - USB slave port (for aluminum versions only)



APPLICATIONS

- Bench and floor scales
- Counting scales
- Inventory control
- Various industrial weighing systems

DESCRIPTION

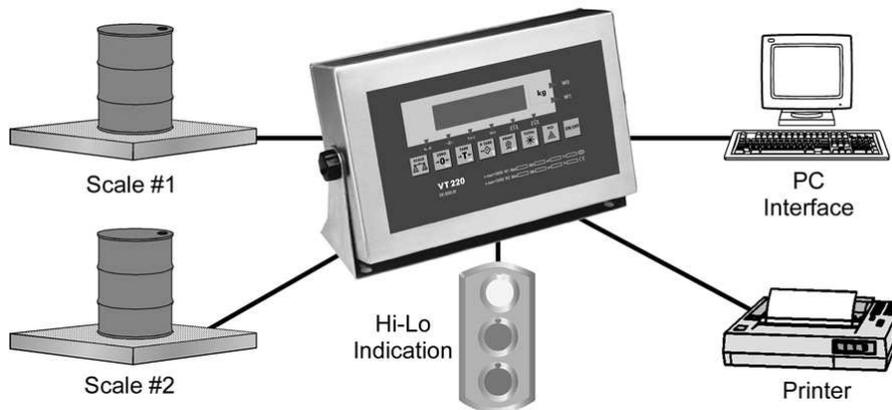
The Model VT 200 / VT 220 units are versatile, general purpose weight indicators, with a wide range of industrial and commercial applications.

The eight key panel enables easy operation, calibration, and setup of the instrument. An integral printer interface allows easy, programmable, ticket formatting. Automatic date and time storage with a real-time clock option clearly documents all printout records.

The VT 220 with the LCD display includes an internal rechargeable battery option for stand-alone autonomous operation.

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

CONFIGURATION



Weight Indicator

SPECIFICATIONS

PERFORMANCE

Resolution

Selectable up to 990000 dd

Conversion Speed

3–228 samples per second (selectable)

Sensitivity

0.25 $\mu\text{V}/\text{Vsi}$ 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

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. Calibration
of two analog inputs (optional) with individual
coefficients.

Weighing Functions

Automatic zero tracking, 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

Piece Counting Mode

Real-Time Clock (Optional)

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

6 digit, 7 segment, LED or LCD

Digit Height

20 mm (VT 200), 16 mm (VT 220)

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

8 key membrane keyboard, with tactile feedback

ELECTRICAL

Voltage

85–265 VAC

Current

500 mA

Battery Operation (Optional)

Internal rechargeable battery (VT 220)
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

0.002% of full scale

Offset Drift

≤ 2 ppm/ $^{\circ}\text{C}$

INPUT 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

SERIAL COMMUNICATION

Serial Output #1

RS-232C Full duplex, programmable

Baud Rate

1200–9600 baud, full duplex

Applications

Continuous, print (on demand), alibi print

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Serial Output #2 (Optional)

RS-232, RS-485 or slave USB (Aluminum only) setup programmable

Modbus ASCII

Baud Rate

2400-115200 baud, half duplex

Applications

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

Aluminium 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

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

APPROVALS (ACCURACY CLASS III / IIIL)**OIML R-76**

10000d single or dual interval
EU-type approval no. 0200-NAWI-03996

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