

# 920i Digital Weight Indicator

920i is easy to use and is truly the first of its kind to blend revolutionary user interfaces, total flexibility and ultimate processing performance with the simplicity of a basic weight meter.

Programmable keys provide instant access to frequently used functions such as selecting a formula, starting a batch, beginning a data collection sequence, or searching or sorting a file. When process changes, soft keys can easily be modified in the field.

From simple transaction and inventory records to complex data manipulation, the 920i will manage critical information in a way that best fits. Battery-backed memory allows customize database files to store information like id numbers, transactions, formulas, label formats, and PLUs. With up to 14MB optional memory.

## Option Cards:

- Digital I/O 24, channel
- A/D dual or single channel
- Analog output selectable (0-10V, 4-20mA)
- Memory module, 1MN
- Two channel serial (accommodates RS-232, RS-485 and 20mA current loop)
- Expansion board (2 and 6 port)

## Network Cards:

- Ethernet TCP/IP 10/100 Base-T module
- Allen-Bradley Remote I/O interface
- Profibus DP interface
- DeviceNet interface
- Ethernet IP for A-B PLC
- ControlNet interface



Measurement  
Canada  
Approved

## Standard Features:

- Large 4.6" W x 3.4" H, 320 x 240 pixel back-lit LCD graphical display
- Selectable character sizes from .25" to 1.2"
- Display up to four scale channels with required Legal-for-Trade information
- 32 scale accumulators
- Five displayed soft keys with 10 user-defined and 14 preset functions
- Front panel or serial configuration/calibration
- NEMA 4X/IP66 stainless steel enclosure
- Four bi-directional communication ports
- Operator prompts
- Four on-board digital I/O
- 100 set-points
- Two option card slots
- 1000-ID truck registers for in/out weighing
- Programmable ticket formats
- ESP event-driven processing
- User programmable 128K flash memory
- Power for 16 (350 ohm) load cells per channel or 32 total per A/D option card

# TECHWEIGH

**LINE VOLTAGES:**

115 or 230 VAC, high pot test

**FREQUENCY:**

50 or 60 Hz

**POWER CONSUMPTION:**

340 mA, maximum @ 115 VAC (26 W)  
240 mA @ 230 VAC (26 W)

**FUSING:**

115 VAC: 2 x 400 mA TR5 subminiature fuses Wickman Time-Lag 19374 Series. UL Listed, CSA Certified and Approved  
230 VAC/North American: 2 x 315 mA TR5 subminiature fuses Wickman Time-Lag 19372 Series. UL Listed, Semco and VDE Approved

**FULL SCALE INPUT SIGNAL:**

Up to 70 mV

**EXCITATION VOLTAGE:**

10 ± 0.5 VDC, 16 x 350Ω or 32 x 700Ω load cells per A/D card

**SENSE AMPLIFIER:**

Differential amplifier with 4 and 6 wire sensing

**ANALOG SIGNAL INPUT RANGE:**

-10 mV to +70 mV

**ANALOG SIGNAL SENSITIVITY:**

0.3 μV/graduation minimum @ 7.5 Hz  
1.0 μV/graduation typical @ 120 Hz  
4.0 μV/graduation typical @ 960 Hz

**A/D SAMPLE RATE:**

7.5 to 960 Hz, software selectable

**INPUT IMPEDANCE:**

>35MΩ typical

**INTERNAL RESOLUTION:**

8,000,000 counts/8,000,000 23 bit

**WEIGHT DISPLAY RESOLUTION:**

9,999,999

**INPUT SENSITIVITY:**

10 nV per internal count

**SYSTEM LINEARITY:**

± 0.01% full scale

**ZERO STABILITY:**

± 150 nV/°C, maximum

**SPAN STABILITY:**

± 3.5ppm/°C, maximum

**CALIBRATION METHOD:**

Software, contents stored in flash memory

**INPUT VOLTAGE DIFFERENTIAL:**

± 800mV referenced to earth ground

**INPUT OVERLOAD:**

Load cell signal lines +/- 10V continuous, ESD protected

**RFI/EMI PROTECTION:**

Signal, excitation and sense lines protected

\* Separate enclosure for expanding beyond two option card slots (universal and desktop)

\*\* Includes flat ribbon cable and power supply cable to CPU board (panel mount)

\*\*\* Includes flat ribbon cable and power supply cable to CPU board (wall mount)

**ANALOG OUTPUT:**

Option card, 16 bit resolution DAC  
Load resistance: 1.1KΩ minimum  
Voltage output: 0 – 10 VDC  
Current output: 0 – 20 mA  
External loop resistance: 840Ω maximum

**MICROCOMPUTER:**

Motorola ColdFire® MCF5307 main processor @ 90 MHz

**DIGITAL I/O:**

Four I/O channels on CPU board; optional 24-channel I/O expansion boards available

**DIGITAL FILTER:**

Software selectable: 1–256, enhanced Rattletrap® hybrid digital filtering

**SERIAL PORTS:**

Four ports on CPU board support up to 115,200 bps; optional dual-channel serial expansion boards available

Port 1: Full duplex RS-232

Port 2: RS-232 with CTS/RTS; PS/2 keyboard interface via DB-9 connector

Port 3: Full duplex RS-232, 20 mA output

Port 4: Full duplex RS-232, 2-wire RS-485, 20 mA output

**DISPLAY:**

4.6" W x 3.4" H (116 W x 86 mm H), 320 x 240 pixel VGA Liquid Crystal Display (LCD) module with adjustable contrast, 75 Hz scan rate 26,000 cd/m<sup>2</sup> brightness

**KEYBOARD:**

27-key membrane panel, PS/2 port for external keyboard connection

**OPERATING TEMPERATURE:**

Legal: 14°F to 104°F (-10°C to +40°C)

Industrial: 14°F to 122°F (-10°C to +50°C)

**STORAGE TEMPERATURE:**

14°F to 158°F (-10°C to +70°C)

**HUMIDITY:**

0-95% relative humidity

**DIMENSIONS:**

Universal: 10.5" W x 11.5" H x 4.5" D (266 W x 215 H x 114 mm D)

Desktop: 10.5" W x 4.5" H x 8.5" D (266 W x 114 H x 215 mm D)

Wall Mount: 14.0" W x 18.0" H x 6.75" D (355 W x 457 H x 171 mm D)

Panel Mount: 11.6" W x 9.1" H x 5.0" D (294 W x 231 H x 127 mm D)

**WEIGHT:**

Universal enclosure: 9.5 lb (4.3 kg)

Desktop enclosure: 7.8 lb (3.5 kg)

Wall Mount enclosure: 23.0 lb (10.4 kg)

Panel Mount enclosure: 8.5 lb (3.9 kg)

**RATING/MATERIAL:**

NEMA 4X/IP66, stainless steel

**APPROVALS:**

NTEP certified per H-44 at 10,000 Divisions, Class III/IIIL, CC# 01-088; Measurement Canada; CE marked; TUV; OIML approved, UK 2658; UL & CUL listed (Universal & Desktop) (Wall Mount approved for 508A industrial control panel) (Panel Mount recognized); OIML 6000/10,000 division 5, UK 2658

**WARRANTY:**

2-year limited warranty

The logo for Tech Weigh features the word "TECH" in a bold, italicized, sans-serif font, followed by "WEIGH" in a larger, bolder, italicized, sans-serif font. The letters are white with a blue and orange gradient shadow effect behind them, giving it a three-dimensional appearance. The background of the logo is a dark blue-to-black gradient.