# TradeRoute<sup>™</sup> HL Series

Legal for Trade Onboard Weighing System





Sinale Assembly





Double Assembly

In-cab Indicator Standard Features: System

### **Legal for Trade Onboard System Includes:**

- 3 or 4 point onboard system RL2000B load cell with 20ft cable, IP67
- 80 ft conduit cable
- Magnetic transport alarm sensor with 15 ft cable
- JB4SS junction box
- · Hydraulic line locks and hoses
- 920i® Onboard Weigh Center
- · Hydraulic pump not included
- . Minimum 3,000 PSI recommended to maintain 2200 PSI during lift

#### 920i Onboard Weigh Center:

- Epson® TM-U295 printer with splash shield
- Pre-installed 30 ft power cable, 30 ft load cell cable and inclinometer
- Transport alarm LEDs
- · Power switch
- · Start/End switch
- · Waterproof enclosure
- Vibration mounts
- · Mounting bracket to body not included

#### 920i USB Universal with Onboard Software:

- · RS-232 port for connecting to a ticket printer
- · Standard onboard software
- USB interface board only

#### **USB Interface Functions:**

- · Available upon special request using a Type A sealed connector
- . USB interface card on Port 2
- Supports weigh mode and configuration mode functions
- Supports upload of databases and 920i configuration file
- Supports download of databases, 920i configuration file, iRite®, COD file and firmware file
- · Sanity checks for command errors
- · Create STD database files

#### Flash Drives:

- Supports USB 2.0 (optional)
- · Create sub directories by unit ID and database name
- · Use the root directory for generic files

### **System Approvals:**

- NTEP CC 15-102
- Measurement Canada AM-4847

# **Approvals**



Measurement Canada Approved

# 920i® USB Indicator

#### Power:

Line voltages: 115 or 230 VAC, 9-36 VDC, +/-6, 25 Watt input Frequency: 50 or 60 Hz

**Specifications:** 

Power consumption: 340 mA, maximum at 115 VAC (26W) 240 mA at 230 VAC (26W)

#### **Excitation Voltage:**

 $10 \pm VDC$ ,  $16 \times 350 \Omega$  or  $32 \times 700 \Omega$  load cells per A/D card

#### **Analog Signal Input Range:**

-10 mV to +45 mV

#### **Analog Signal Sensitivity:**

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

#### A/D Sample Rate:

7.5 to 960 Hz, software selectable

#### Resolution:

Internal resolution: 8 million counts Weight display resolution: 9,999,999

#### **System Linearity:**

± 0.01% full scale

#### Digital I/O:

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

#### **Circuit Protection:**

RFI, EMI, ESD protection

#### **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: USB Type A and Type B connectors

Port 3: Full duplex RS-232, 20 mA output Port 4: Full duplex RS-232, 2-wire RS-485,

20 mA output

### Display (W x H):

4.6 x 3.4 in (116 W x 86 mm H), 320 x 240 pixel VGA Liquid Crystal Display (LCD) module with adjustable contrast

#### Keyboard:

27-key membrane panel, tactile feel

#### Operating Temperature:

Legal: 14°F to 104°F (-10°C to 40°C) Industrial: 14°F to 122°F (-10°C to 50°C)

### Weight:

45 lb, weigh center

### Rating/Material:

NEMA 4X/IP66, stainless steel

### Warranty:

Two-year limited warranty

### **Indicator Approvals:**

NTEP CC 01-088, Class III/IIIL 10,000d Measurement Canada AM-5426, Class III/III HD 10,000d OIML UK 2658, 6,000/10,000 CF marked UL & C-UL listed (Universal.

Deep and Wall Mount Enclosure)

# **TradeRoute™ HL Series**

Legal for Trade Onboard Weighing System

### Specifications: RL2000B S-Beam Load Cell

#### **Full Scale Output:**

3.0 mV/V

#### **Output Resistance:**

350 (± 3) ohms

#### Input Resistance:

385 (± 5) ohms

#### Material/Finish:

High-alloy steel, nickel plated

#### Temperature:

Compensated range 14°F to 104°F (-10°C to 40°C)

## Seal Type:

Environmentally sealed, IP67

#### Safe Overload:

150% Full scale

#### **Rated Excitation:**

10V DC (15V maximum)

#### Nonlinearity:

0.03% Full scale

#### **Hysteresis:**

0.02% Full scale

#### Insulation Resistance:

5000 megohms

### **Cable Length:**

20 ft (6.1 m)

#### **Cable Diameter:**

0.200 polyurethane jacket

#### **Cable Color Code:**

Red	+ Excitation
Black	Excitation
Green	+ Signal
White	Signal

### Warranty:

Two-year limited warranty

#### Approvals:

FM approved NTEP approved CE marked

### Specifications: JB4SS Junction Box

#### Cable Fittings:

#### PN 88956:

- (4) PG7 0.118-0.255 strain relief
- (2) PG11 0.197-0.394 strain relief
- (1) PreVent™ breather vent

#### PN 107700:

- (4) PG9 0.138-0.315 strain relief
- (2) PG11 0.197-0.394 strain relief
- (1) PreVent<sup>™</sup> breather vent

#### **Enclosure:**

Stainless steel NEMA Type 4X

#### Connectors:

Spring clamp screwless, 12-28 AWG

#### Trimming:

Individual cell, signal trim, ranges zero trim 12.49 K-100 K ohms with 2.49 K ohms isolation resistors

### Potentiometers:

100 K ohms, 25 turn cermet

#### Circuit Board:

3.8. x 2.3 in. (96.5 x 58.4 mm), with conformal coating

#### Warranty:

One-year limited warranty

### Specifications: Epson® TM-U295 Printer

#### Print Speed:

1.9 to 2.3 lines per second (5 x 7 character, 3 dot line spacing)

#### **Column Capacity:**

35/42 columns

#### **Characters Per Line:**

35 standard font

#### **Print Area:**

2.59 in W (65.8 mm W)

### **Character Formation:**

5 x 7 and 7 x 7 dot matrix

#### **Character Height:**

0.11 standard font

### Print Head Life:

Approximately 100 million strokes/pin

#### Form Thickness:

Single-ply - 0.003 in to 0.009 in (0.08 mm to 0.23 mm) Copy paper - 0.003 in to 0.014 in (0.08 mm to 0.36 mm)

#### Ribbon:

Cassette-type purple ribbon. Ribbon life is approximately 1.5 million characters (continuous prints). Black ink also available.

#### Approvals:

UL listed, CSA certified, CE marked

#### Warranty:

One-year limited warranty (includes print head)