# TradeRoute<sup>™</sup> HL Series Legal for Trade Onboard Weighing System



Double-double Assembly

# Standard Features System

#### Legal for Trade Onboard System Includes:

- 3- or 4-point onboard system RL20000 load cell with 20 ft cable, IP67
- 80-ft conduit cable
- Magnetic transport alarm sensor with 15 ft cable
- JB4SS junction box
- · Hydraulic line locks and hoses
- 920i<sup>®</sup> Onboard Weigh Center
- Hydraulic pump not included
- · Minimum 3,000 PSI recommended to maintain 2,200 PSI during lift

#### **Approvals:**

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

#### 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 ticket printer
- · Standard onboard software
- · USB interface board only

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

- Available upon special request using a Type A sealed connection
- 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<sup>®</sup>, COD file and firmware file
- · Sanity checks for command errors
- · Create STD database files

#### **Flash Drives:**

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

#### **Specifications:** 920i<sup>®</sup> USB Indicator

#### Power:

DC voltage: 9-36VDC, Consumption 25W

#### **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:



**Approvals** 

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

#### Kevboard:

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 Type 4X/IP66, stainless steel

## Warranty:

Two-year limited warranty **Indicator Approvals:** 

MTEP 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 CE marked UL & C-UL listed (Universal,

Deep and Wall Mount Enclosure)



# **ONBOARD WEIGHING**

# TradeRoute™ HL Series Legal for Trade Onboard Weighing System

Π.



Single Assembly

#### Specifications RL2000I S-Beam Load Cell

Full Scale Output: 3.0 mV/V

Output Resistance:  $350 (\pm 3)$  ohms

Input Resistance:  $385 (\pm 5)$  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: 10 V DC (15 V maximum)

Nonlinearity: 0.03% Full scale

Hysteresis: 0.02% Full scale

Insulation Resistance: 5,000 megohms

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:

cFMus NTEP

## 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<sup>™</sup> 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: 100,000 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 Copy paper - 0.003 in to 0.014 in

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)

Double Assembly

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