# TradeRoute<sup>™</sup> HL Series

Legal for Trade Onboard Weighing System

# **Specifications:** 920i® USB Indicator

#### Power:

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

Frequency: 50 or 60 Hz

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 Type 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)



920i Onboard Weigh Center



Sinale Assembly



Double Assembly

# 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 15ft cable
- JB4SS junction box
- · Hydraulic line locks and hoses
- 920i® Onboard Weigh Center
- · Hydraulic pump not included
- . Minimum 3,000 PSI recommended to maintain 2,200 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 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®, 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

# **System Approvals:**

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

# **Approvals**



Measurement Canada Approved

# TradeRoute™ HL Series

Legal for Trade Onboard Weighing System

# **Specifications: RL2000B S-Beam Load Cell**

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

3.0 mV/V

#### **Output Resistance:**

 $350 (\pm 3) \text{ ohms}$ 

#### 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:**

5,000 megohms

#### Cable Length:

20ft (6.1 m)

#### **Cable Diameter:**

0.200 polyurethane jacket

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

Red	+ Excitation
Black	Excitation
Green	+ Signal
White	Signal

#### Warrantv:

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

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

## Potentiometers:

100 K ohms, 25 turn cermet

#### Circuit Board:

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

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)

# **TradeRoute™ HL Series** Legal for Trade Onboard Weighing System

# Part Number/Price

Part #	Model #	Description	Price
Complete	e System		
131098	-	15,000 lb x 5 lb/8,000 x 2 kg 3-point onboard system (Class III), qty one each 0B5-SGL5, 0B10-DBL5, 920i® Weigh Center	Consult
131099	_	20,000 lb x 5 lb/10,000 x 2 kg 4-point onboard system (Class III/IIIL), qty two OB10-DBL5, qty 1, 920i Weigh Center	Consult
131100	_	30,000 lb x 10 lb/15,000 x 5 kg 3-point onboard system (Class III), qty one each OB10-SGL10, OB20-DBL10, 920i Weigh Center	Consult
131101	_	40,000 lb x 10 lb/20,000 x 5 kg 4-point onboard system (Class III) qty two OB20-DBL10 qty 1, 920i Weigh Center	Consult
131102	_	20,000 kg x 5 kg 3-point onboard system (Class III) gty one each, OB15-SGL105, OB30-DBL15, 920i Weigh Center	Consult
131103	_	60,000 lb x 10 lb/30,000 x 5 kg 4-point onboard system (Class IIIL/IIIHD) qty two, OB30-DBL15, qty 1, 920i Weigh Center	Consult
Consult	_	50,000 lb kit x 10 lb/30,000 x 5 kg 4-point onboard system (Class III/IIIL), qty two, 0B30-DBL15, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable (PN 127958 with PN 155300)	Consult
Consult	_	60,000 lb kit x 10 lb/30,000 x 5 kg 4-point onboard system (Class III/IIIL), qty two, OB30-DBL15, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable (PN 127958 with PN 155300)	Consult
Weighing	g Module Assem	bly Kits (indicator package required)	
154125	_	20,000 lb x 5 lb/10,000 x 2 kg 4-point onboard system (Class III/IIIL), qty two, 0B10-DBL5, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable	Consult
154124	_	40,000 lb x 10 lb/20,000 x 5 kg 4-point onboard system (Class III/IIIL), qty two, OB20-DBL10, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable	Consult
154122	_	60,000 lb x 10 lb/30,000 x 5 kg 4-point onboard system (Class III/IIIL), qty two, OB30-DBL15, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable	Consult
Consult	_	50,000 lb kit x 10 lb/30,000 x 5 kg 4-point onboard system (Class III/IIIL), qty two, OB30-DBL15, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable (PN 127958 with PN 155300)	Consult
Consult	_	60,000 lb kit x 10 lb/30,000 x 5 kg 4-point onboard system, qty two, 0B30-DBL15, JB4SS, 30 ft homerun cable, 60 ft conduit, power cable (Class III/IIIL) (PN 127958 with PN 155300)	Consult
System (	Components		
131442	_	920i® Weigh Center package includes: indicator, Epson® Ticket Printer, 25 ft load cell cable, power cable, housing, vibration mounts for installation to customer supplied mounting bracket	Consult
154109	_	In-cab indicator 920i (requires 154112, 154111 and printer)	Consult
154112	_	In-cab LED alarm assembly, 8ft cable	Consult
154111	_	Inclinometer, junction box assembly, 35 ft cable	Consult
65635	_	Epson TM-U295 printer	Consult
131811	_	Optional LED cab alarm, 35ft	Consult
15494	EL146HE	Four conductor hostile environment load cell cable	Consult/ft
88956	JB4SS	JB4SS signal trim j-box with PG37 cord grips	Consult
128123	_	Conduit, 1/2 in non metallic liquid tight polytuf®	Consult/ft
127617		Retrofit kit 10,000 lb eyebolts for 1 cell	Consult
128670	0B5-SGL5	Low profile 5,000 lb single assembly	Consult
128666	OB10-DLB5	Low profile 10,000 lb double assembly	Consult
127956	0B10-SGL10	Low profile 10,000 lb single assembly	Consult
127958	0B20-DBL10	Low profile 20,000 lb double assembly	Consult
127959	0B30-DBL15	Low profile 30,000 lb double assembly	Consult
155300		Low profile 30,000 lb single tandem assembly	Consult
130107	Packaging	Double/double packaging	Consult

Note: Connect to your existing hydraulic pump with a maximum pressure of 3,000 PSI with a minimum flow of 5 GPM for best performance of lifting speed.

Note: Contact factory for other capacities not shown.