## Sct-30 and Sct-40 Signal Conditioning Transmitter/Indicator

SCT converter with analog output **APPROVALS APPROVALS** c**R**us c **FL**°us

	SCT-30 Specifications	SCT-40 Specifications
Power	Input: 12 -24 VDC Power consumption: 3 watts	Input: 12 -24 VDC Power consumption: SW
Excitation Voltage	5 VDC, 120 mA, 8 x 350 Ω	5 VDC, 240 mA, 16 x 350 Ω
Analog Signal Input Range	± 39 mV	±39 mV
Analog Signal Sensitivity	0.1 μV/graduation minimum 1.0 μV/graduation recommended	0.1 μV/graduation minimum 1.0 μV/graduation recommended
A/D Sample Rate	300 Hz	600 Hz
Resolution	Internal resolution: 16 million counts System linearity: ± 0.01% full scale	Internal resolution: 16 million counts Weight display resolution: 999,999 System linearity: $\pm$ 0.01% full scale
Digital Inputs/Outputs	N/A	3 inputs 5-24 VDC, 5 outputs, 115 VAC/150 mA
Serial Port	RS-485	RS-485 or RS-232 simplex supports up to 115,200 bps
Analog Output (if equipped)	Optoisolated, 16 bit 0-20 mA, 4-20 mA (max 300 ohm) 0-10 VDC, 0-5 VDC (min 10,000 ohm)	Optoisolated, 16 bit 0-20 mA, 4-20 mA (max 300 ohm) 0-10 VDC, 0-5 VDC (min 10,000 ohm)
Display	Eight-digit alphanumeric tow line LCD, 5 mm high	Backlit graphic LCD, transmissive 128 x 64 pixel resolution, 60 x 32 mm visible area
Keyboard	Control knob and DIP switches	Five-key tactile keypad Test, Zero, Tare, Print Menu, Escape, Left and Up, Navigator, Enter
Temperature & Humidity	Working temperature: -4° F to 140° F (-20° C to 60° C) Humidity: 85% non-condensing	Working temperature: -4° F to 140° F (-20° C to 60° C) Humidity: 85% non-condensing
Dimensions (W x H x D)	SCT converter (W x H x D): 3.54 in x 3.74 in x 2.36 in (90 mm x 95 mm x 60 mm) IP67 enclosure (W x H x D): 6.69 in x 5.51 in x 3.74 in (170 mm x 140 mm x 95 mm)	SCT converter (W x H x D): 5.82 in x 3.62 in x 2.36 in (148 mm x 92 mm x 60 mm)
Weight	1 lb (0.5 kg)	1 lb (0.5 kg)
Rating/Material	DIN rail mount: NEMA Type 1 Sealed enclosure: NEMA Type 4/IP67, plastic enclosure, clear cover, six PG9 cord grips	DIN rail mount: NEMA Type 1 Sealed enclosure: NEMA Type 4/IP67, plastic enclosure, clea cover, six PG9 cord grips
Warranty	One-year limited warranty	One-year limited warranty
	Standard Features	Standard Features
	LCD display, 5 mm, eight-digit	• LCD display, 60 mm x 32 mm
	<ul> <li>Powers up to eight (350.0) load cells in parallel (with a</li> </ul>	<ul> <li>Supports up to eight independent reading channels</li> </ul>

• Powers up to eight  $(350 \Omega)$  load cells in parallel (with a 24-bit A/D converter)

- A/D converter 24-bit (16,000,000 points) 4.8 kHz
- 16-bit analog output: 0-20 mA, 4-20 mA, 0-5 V, 0-10 V, ±5 V, and ±10 V
- Mounting on Omega/DIN rail for back panel or junction box
- IP67-rated enclosed versions
- · Diagnostic message for load cell disconnect and over capacity errors
- · Supports up to eight independent reading channels for load cells
- · Displays weight, configuration, calibration and error conditions
- DIN rail mounting
- Theoretical calibration, real-weight calibration and error conditions
- · Push button or preset tare
- Converts digital weight to analog output or optional DeviceNet<sup>™</sup>, Profibus<sup>™</sup> or EtherNet/IP<sup>™</sup> protocols
- Supports ASCII or MODBUS RTU protocols
- · Full scale analog cut put with zero setting and PLC correction of analog signal
- · Bit swapping selection for little endian and endian format • Three digital inputs, five digital outputs
- One serial port, RS-232 simplex and RS-485 connection

# SCT-1100, 2200, SCT-10, 20, 30, and SCT-40 Signal Conditioning Transmitter/Indicator

## SCT-1100

#### Part Number/Price

Part #	Description	Est. Weight	Price
182588	Indicator, SCT1100-AN 12-24VDC and, RS485/232 Serial Port, Analog Out DIN Mount, four load cell input	1 lb	\$385.00

#### SCT-2200

#### Part Number/Price

Part #	Description	Est. Weight	Price	
Transmit	Transmitters			
182587	Indicator, SCT2200 12-24VDC,and RS485/232 Serial Port, DIN Mount	1 lb	\$270.00	
182589	Indicator, SCT2200-AN Analog Output, 12- 24VDC, and RS485/232 Serial Port DIN Mount	1 lb	\$385.00	
Fieldbus				
182592	Fieldbus, SCT2200,Profinet 12-24VDC, RS485 Connection and ProfiNet output DIN Mount	1 lb	\$470.00	
182594	Fieldbus, SCT2200, Wi-Fi 12-24VDC, RS485 Connection and WiFi and TCP/IP Output DIN Mount	1 lb	\$460.00	
182595	Fieldbus, SCT2200, Ethernet TCP/IP 12-24VDC, RS485 Connection and TCP/IP and MODBUS TCP output DIN Mount	1 lb	\$360.00	
182593	Fieldbus, SCT2200, Profibus 12-24VDC, RS485 Connection and Profibus output DIN Mount	1 lb	\$300.00	
182591	Fieldbus, SCT2200, EtherNet/IP 12-24VDC, RS485 Connection and EtherNet/IP output DIN Mount	1 lb	\$470.00	
182596	Fieldbus, SCT2200, DeviceNet 12-24VDC, RS485 Connection and DeviceNet output DIN Mount	1 lb	\$470.00	
182598	Fieldbus, SCT2200, EtherCAT 12-24VDC, RS485 Connection and EtherCAT output DIN Mount	1 lb	\$470.00	
182597	Fieldbus, SCT2200, CANopen 12-24VDC, RS485 Connection and CANopen output DIN Mount		\$470.00	
182599	Cable, SCT2200, RS485		\$10.00	

#### SCT-30

#### Part Number/Price

Part #	Description	Est. Weight	Price
156794	SCT-30 converter with analog output	1 lb	\$325.00
156834	SCT-30 converter with analog output in enclosure	1 lb	\$475.00
88792	12 VDC 1.2A DIN rail mount power supply	1 lb	\$130.00
119244	24 VDC 1.3A DIN rail mount power supply	1 lb	\$130.00
131129	Installation manual	1 lb	\$25.00

#### SCT-40

#### Part Number/Price

Part #	Description	Est. Weight	Price
170470	SCT-40 with analog output	1 lb	\$595.00
170471	SCT-40 with DeviceNet output	1 lb	\$850.00
170472	SCT-40 with Profibus	1 lb	\$850.00
170473	SCT-40 with EtherNet/IP	1 lb	\$850.00
170474	SCT-40 with TCP/IP	1 lb	\$795.00
170475	SCT-40 with Modbus/TCP	1 lb	\$850.00
170476	SCT-40 with ProfiNet/I/0	1 lb	\$850.00
88792	12 VDC 1.2 A DIN rail mounted power supply	1 lb	\$130.00
119244	24 VDC 1.3 A DIN rail mounted power supply	1 lb	\$130.00
131128	Installation manual	1 lb	\$25.00

#### SCT-10

#### Part Number/Price

Part #	Description	Est. Weight	Price
129393	SCT-10 converter with analog output	1 lb	\$400.00
129394	SCT-10 converter with analog output in enclosure	1 lb	\$550.00
88792	12VDC 1.2 A DIN rail mounted power supply	1 lb	\$130.00
119244	24VDC 1.3 A DIN rail mounted power supply	1 lb	\$130.00
131129	Installation manual	1 lb	\$25.00

#### SCT-20

#### Part Number/Price

Part #	Description	Est. Weight	Price
129396	SCT-20 converter with analog output	1 lb	\$400.00
129397	SCT-20 converter with DeviceNet <sup>™</sup> output	1 lb	\$600.00
129558	SCT-20 converter with Profibus <sup>™</sup> DP	1 lb	\$600.00
129398	SCT-20 converter with EtherNet/IP <sup>™</sup>	1 lb	\$750.00
132534	SCT-20 converter with TCP/IP <sup>TE</sup> therNet	1 lb	\$750.00
156903	SCT-20 converter with Modbus/TCP	1 lb	\$750.00
88792	12 VDC 1.2 A DIN rail mounted power supply	1 lb	\$130.00
119244	24 VDC 1.3A DIN rail mounted power supply	1 lb	\$130.00
131128	Installation manual	1 lb	\$25.00

**INDICATORS / CONTROLLERS** 

### INTRINSICALLY SAFE **320IS** Intrinsically Safe Digital Weight Indicator



### Standard Features

- · LED display, 0.8 in (20 mm), six-digit, 16-segment
- Stainless steel NEMA Type 4X/IP66 enclosure
- T4 temperature rating
- Front panel digital calibration
- · Automatic zero and span temperature compensation
- · Excitation for four 350 ohms or eight 700 ohms load cells
- Gross/tare/net computation
- Tilt stand
- Duplex fiber optic interface
- Power ON/OFF; battery save mode
- I/O Module Option: two serial ports, two analog outputs, four digital inputs, 4 relay contact outputs
- Factory Mutual (FM) entity approved for classes I, II, and III; Divisions 1 and 2; Groups A, B, C, D, E, F and G
- FM Entity Approved for use in hazardous locations per Rice Lake Weighing Systems control drawing file number 72717.

Rice Lake Weighing Systems<sup>®</sup> warrants that all Rice Lake Weighing Systems intrinsically safe (IS) equipment and systems installed by a distributor or original equipment manufacturer (OEM) will operate per written specifications as confirmed by the distributor/OEM and accepted by Rice Lake Weighing Systems. All systems and components are warranted against defects in materials and workmanship for one year. All Rice Lake Weighing Systems intrinsically safe equipment carries a Factory Mutual approval and is documented on various control drawings. Each device is manufactured Rice Lake Weighing Systems factory authorized personnel. To preserve the warranty and Factory Mutual approval, all repairs or replacement of circuit boards or components housed within the enclosures must be performed by Rice Lake Weighing Systems factory authorized personnel.

A CAUTION! The equipment contained within this Explosive Environment section requires greater attention to specification and installation guidelines. Improper specification, installation or service of these products can result in loss of equipment or serious injury.

#### Specifications

- Load Cell Excitation: 3.0 VDC at 87.5 Ω
- 4.6 VDC at 700  $\Omega$

Load Cell Current: 34 mA (4 x 350  $\Omega$  load cells) or (8 x 700  $\Omega$  load cells)

- Load Cell Cabling:
- Four- and six-wire with remote sensing (recommended)
- **Analog Signal Input Range:** 0.6 mV/V - 4.0 mV/V
- Analog Signal Sensitivity: 0.2 µV/graduation minimum 1.5 µV/graduation recommended
- **Conversion Rate:** 60 updates/second
- **Resolution:** 10,000 displayed graduations (NTEP Certified),
- 100,000 expanded
- The maximum number of allowed graduations will vary by application

**Display Increments:** 

1, 2, 5

**Display:** 

Six-digits, Light Emitting Diode (LED); 16-segment, 0.8 in (20 mm) digits

**Decimal Point:** Configurable with dead zeros

Unit Switching:



Configurable for 2 units of measurement with front panel operation with

conversion for tare and setpoint values Front Panel Control Switches:

Zero, gross/net, tare, print, units conv

Front Panel:

Six-button flat membrane panel Front Panel LED Annunciators:

Center zero, gross, net, motion, lb, kg, oz, g

Motion Band:

Configurable to  $\pm$  1 or  $\pm$  3 graduations, 1 second delay (or Off)

**Power Input:** 5.8 - 7.9 VDC.100 - 175 mA Maximum power consumption 0.25 watts

**Operating Temperature:** 14° F to 104° F (-10° C to 40° C) legal for trade

Rating/Material: Stainless steel NEMA Type 4X/IP66 enclosure

#### **Optional Battery:**

Operating times:  $4 \times 350 \Omega = 35-40$  hrs  $1 \times 350 \Omega = 40-50 \text{ hrs}$  $8 \times 700 \Omega = 35-40 \text{ hrs}$ Charging Times: 10 hrs for dead battery,

14 hrs for initial charge

#### Weiaht:

6.1 lb (2.8 kg)

Warranty: One-year limited warranty

#### Approvals:

NTEP CC 03-078 Class III/IIIL 10,000d UL/cUL Listed FM Entity Measurement Canada AM-5560





**Approvals** 

Measurement Canada Approved

FM

APPROVED

