Indicators / Controllers

INDICATORS / CONTROLLERS

1280 Enterprise™ Series

Programmable Digital Weight Indicator

Panel Mount   *Wall Mount*

7-inch Touch-only

12-inch Touch-only

Universal

Approvals

NTEP • Measurement Canada Approved • OIML • CE • cULus LISTED • c RU us • CB

Standard Features

- Customizable color touchscreen with graphical user interface
- User-defined softkeys, icons and graphics
- Tactile keypad for scale operations, numeric entry and navigation
- On-screen keyboard available during entry mode (or external keyboard)
- Built-in web server for remote access, systems integration and data monitoring
- Multi-language operation and text entry
- Supports eight scales within five different kinds:
  - Analog load cell, multi-range/interval weighing
  - Total scale summing
  - Serial input scales
  - iQUBE[2]® and iQUBE[3] scales
  - Program scales
- Six smart card slots for additional scale channels, serial ports, digital inputs and outputs, analog outputs and protocol interfaces
- iRite™ Programming Software
  - Five built-in applications: Truck In/Out, recipe storage, filling/dosing, counting, checkweighing
  - Customizable user programs with event-based functions
  - 150 built-in functions for common processes and data tables
  - Customize and transfer data via email, FTP server and networked printers
  - Display data with line charts or bar graphs
  - iRite reporting of iQUBE[2] and iQUBE[3] alerts
- Email, USB, Ethernet TCP/IP, Wi-Fi Direct®, two serial ports RS-232 or RS-485
- Alibi memory captures serial port transmissions
- Four configurable data-stream formats for PC, printers and remote displays
- 100 setpoints, 18 configurable setpoint types
- Eight digital I/O for control and pulse count
- Three different enclosure types: universal with tilt stand, panel mount and wall mount

Specifications

Power:
AC voltages: 100 to 240 VAC; 50/60 Hz
DC voltages: 11 to 30 VDC

Power Consumption:
60 W

Excitation Voltage:
10 VDC (± 5 VDC)
16 × 350 ohm or 32 × 700 ohm load cells per A/D card

Analog Signal Input Range:
-60 mV to 60 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum at 7.5 Hz to 120 Hz
1.0 µV/graduation recommended

A/D Sample Rate:
7.5 to 960 Hz, software selectable

Resolution:
Internal: 8,000,000 counts
Display: 1,000,000

System Linearity
± 0.01% full scale

Digital I/O:
Eight I/O channels on CPU board
Optional 24-channel I/O expansion boards

Communication Ports:
Port 1 & 2: Full duplex RS-232 with CTS/RTS, RS-422/485
Baud rate: 1200 to 115200
Port 3: USB 2.0 Device (Micro)
USB host: (2) Type A connectors max 500 mA
Ethernet: Wired 10/100 Auto-MDX
Ethernet: Wireless 802.11 b/g/n 2.4GHz

Onboard:
Selectable filters: Three stage, Adaptive or Damping
Embedded Linux® OS
8 GB eMMC (system use)
1 GB DDR3 RAM
460 MB onboard database (SQLite) storage
Up to 32 GB micro SD card (sold separately)

Display:
Seven-inch, 800 × 480 pixel, 500 or 1,000 NIT
Twelve-inch, 1280 × 800 pixel, 1,500 NIT

Keys/Buttons:
22-key membrane panel, tactile buttons, on-screen keyboard for text and numeric entry, USB port for flash drive, keyboard and printer

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 131 °F (-20 °C to 55 °C)

Rating/Material:
Universal: IP69K
Wall Mount: IP66
Panel Mount: IP69K, NEMA Type 4X and 12
Stainless steel 304 enclosure

Weight:
Universal enclosure: 11 lb (4.9 kg)
Panel mount enclosure: 8 lb (3.6 kg)
Wall mount enclosure: 23 lb (10.4 kg)
Panel mount 7 in touch-only: 7 lb (3.1 kg)
Panel mount 12 in touch-only: 10 lb (4.5 kg)

Warranty:
Two-year limited

EMC Immunity:
10 V/m

Approvals:
NTEP 15-001/Class III/IIIL 10,000 d
Measurement Canada AM-5980C,
Class III/III HD 10,000 d
OIML R76/2006-A-NL1-19.23 Class III/IIII 10,000 d
OIML R61-1/2017 TC8596
cULus Listed (Universal, Wall Mount)
cULus Recognized (Panel Mount)
CE Marked

7-inch model with keypad

7-inch touch-only model

12-inch touch-only model

INDICATORS / CONTROLLERS

Numeric Keypad Models:

1280-2

1280-3

1280-4

Dimensions

Universal (1280-2)			
A	10.86 in (276 mm)	E	9.00 in (229 mm)
B	9.00 in (229 mm)	F	12.50 in (318 mm)
C	9.24 in (235 mm)	G	5.25 in (133 mm)
D	4.97 in (126 mm)		

Wall Mount (1280-3)			
A	14.92 in (379 mm)	E	19.64 in (499 mm)
B	11.00 in (279 mm)	F	14.20 in (361 mm)
C	18.22 in (463 mm)	G	8.08 in (205 mm)
D	18.84 in (479 mm)		

Panel Mount (1280-4)			
A	9.00 in (229 mm)	D	5.34 in (136 mm)
B	9.00 in (229 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

Touch-only Models:
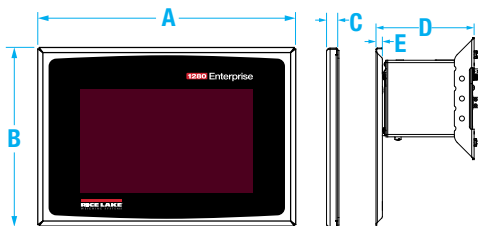
1280-5
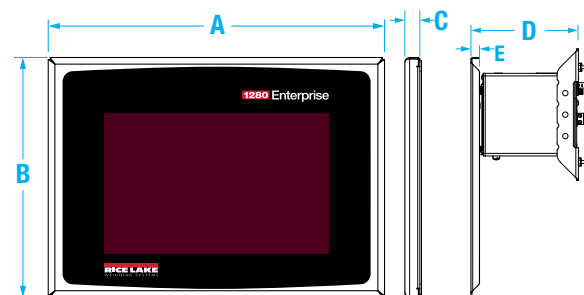
1280-6

Dimensions

7-inch Touch-only (1280-5)			
A	9.00 in (229 mm)	D	5.34 in (136 mm)
B	6.22 in (158 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

12-inch Touch-only (1280-6)			
A	14.00 in (356 mm)	D	5.34 in (136 mm)
B	10.00 in (254 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

Part Number/Price

Part #	Description	Power	Display	Option Installed	Price
Universal Enclosure with 500 NIT Display (1280-2)					
171427 †	1280 Universal	115 VAC	500 NIT	Single Scale Card	$3,850.00
171441 ††	1280 Universal	100 to 240 VAC	500 NIT	Single Scale Card	$3,850.00
171662 †	1280 Universal	115 VAC	500 NIT	Dual Scale Card	$4,050.00
172188 ††	1280 Universal	100 to 240 VAC	500 NIT	Dual Scale Card	$4,150.00
Panel Mount Enclosure with 500 NIT Display (1280-4)					
171663	1280 Panel Mount	100 to 240 VAC	500 NIT	Single Scale Card	$3,725.00
172186	1280 Panel Mount	100 to 240 VAC	500 NIT	Dual Scale Card	$3,950.00
Wall Mount Enclosure with 500 NIT Display (1280-3)					
173673 †	1280 Wall Mount	115 VAC	500 NIT	Single Scale Card	$4,250.00
174143 ††	1280 Wall Mount	100 to 240 VAC	500 NIT	Single Scale Card	$4,250.00
174144 †	1280 Wall Mount	115 VAC	500 NIT	Dual Scale Card	$4,550.00
174145 ††	1280 Wall Mount	100 to 240 VAC	500 NIT	Dual Scale Card	$4,550.00
Wall Mount Enclosure with 1000 NIT Display (1280-3)					
172184 †	1280 Wall Mount	115 VAC	1,000 NIT	Single Scale Card	$4,350.00
172185 ††	1280 Wall Mount	100 to 240 VAC	1,000 NIT	Single Scale Card	$4,350.00
206563 †	1280 Wall Mount	115 VAC	1,000 NIT	Dual Scale Card	$4,550.00
172187 ††	1280 Wall Mount	100 to 240 VAC	1,000 NIT	Dual Scale Card	$4,650.00
Touch-only 7 inch with 500 NIT Display (1280-5)					
186618	1280 Touch-only 7 in	100 to 240 VAC	500 NIT	Single Scale Card	$3,750.00
Touch-only 12 inch with 1500 NIT Display (1280-6)					
186465	1280 Touch-only 12 in	100 to 240 VAC	1,500 NIT	Single Scale Card	$4,375.00

† US plug (NA) - Type B   †† Euro Plug - Type E   (Brazil) - Type N

††† BS1363 (UK) - Type G   †††† AS 3112 (Australian) - Type I

Model Reference Chart
Choose any options to best fit your
application and we customize

ENCLOSURE TYPE
1 Universal (1280-2)
2 Panel (1280-4)
3 Wall (1280-3)
4 Touch-only Panel 7 in (1280-5)
5 Touch-only Panel 12 in (1280-6)

POWER TYPE
1 AC
2 DC

DISPLAY TYPE
1 500 NIT 7 in Universal
2 1000 NIT 7 in Universal
3 500 NIT 7 in Panel/Wall
4 1000 NIT 7 in Panel/Wall
5 1500 NIT 12 in Panel

CORD TYPE
1 US Plug Universal
2 Brazil Plug Universal
3 Euro Plug Universal
4 US Plug Wall
5 Euro Plug Wall
6 Brazil Plug Wall
7 UK Plug Universal
8 AU/NZ Plug Universal
9 UK Plug Wall
10 AU/NZ Plug Wall

OPTION CARDS ALL SLOTS MUST BE FILLED
A Blank
If no option, controller will need 6 blanks
B Single A/D Scale
C Dual A/D Scale
D 24 Channel Digital I/0
E Dual Serial Channel
F 4-dry Contact Relay
G Single Analog Out
H Dual Analog Out
I Analog Out
J EtherNet/IP™
K DeviceNet®
L PROFINET
M Modbus TCP
N PROFIBUS® DP
O EtherCat®
P PowerLink

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Single A/D Scale

Excitation Voltage:
10 VDC bipolar, 4 or 6 wire sensing
16 × 350 ohms per channel
Analog Input Signal:
- 10 to + 40 mV

Part #	Description	Price
220026	Single scale A/D	$475.00
166957	A/D sealing kit	$15.00

Dual A/D Scale

Excitation Voltage:
10 VDC bipolar, 4 or 6 wire sensing
8 × 350 ohms per channel
Analog Input Signal:
- 10 to + 40 mV

Part #	Description	Price
220027	Dual scale A/D	$675.00
166957	A/D sealing kit	$15.00

Digital I/O

24 channels, configurable as inputs or outputs
Inputs: 5 VDC max, active low; Outputs: 20 mA
max per channel, active low; 5 VDC
source available: 500 mA max

Part #	Description	Price
164684*	Digital I/O	$350.00
170008	DIO adapter, includes 60 pin flat ribbon cable, 24 in	$130.00
170009	DIO adapter, includes 60 pin round cable, 60 in	$225.00
170736	DIO adapter, includes 60 pin cable and cord grip, 60 in	$155.00

* 24 I/O ribbon cable required.

Dual Serial Channel

Two-channel, full duplex RS-232 with CTS/
RTS, RS-485 or RS-422, 1200 to 115200 baud

Part #	Description	Price
164685	Dual serial channel	$425.00

Single Analog Out

16 bit, voltage output 0 to 10 VDC, current
output 0 to 20 mA, 4 to 20 mA

Part #	Description	Price
165366	Single analog out	$375.00

Dual Analog Out

16 bit, voltage output 0 to 10 VDC, current
output 0 to 20 mA, 4 to 20 mA

Part #	Description	Price
164686	Dual analog out	$550.00

Relay Card

Relay four-dry contact, max current
3 A @ 30 VDC, 3 A @ 250 VAC

Part #	Description	Price
164689	Relay card	$425.00

Analog Input

Analog Input Signal:
± 10 VDC, ± 100 mV, 0 to 20 mA

Part #	Description	Price
164687	Dual analog input	$650.00

Data Exchange with PLC/DCS Systems

EtherNet/IP™

Part #	Description	Price
165792	EtherNet/IP, single port	$620.00
208129	EtherNet/IP, dual port	$805.00

DeviceNet®

Part #	Description	Price
165793	DeviceNet	$620.00

PROFINET

Part #	Description	Price
165794	PROFINET	$620.00

Modbus TCP

Part #	Description	Price
165796	Modbus TCP	$620.00

PROFIBUS® DP

Part #	Description	Price
165795	PROFIBUS DP	$620.00

EtherCAT®

Part #	Description	Price
179533	EtherCAT	$620.00

INDICATORS / CONTROLLERS

1280 Enterprise™ Series
Programmable Digital Weight Indicator

Options/Accessories
To have your option factory installed, please specify when placing your order.

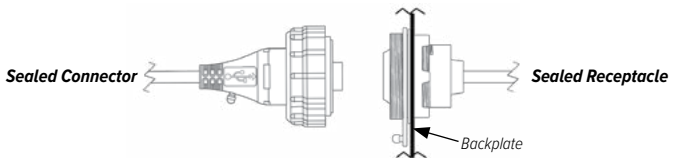| Part #	Description	Price
Manuals and Software		
167659	Technical Manual	$35.00
72809	Interchange database software	$325.00
164939	8 GB Micro SD card with SD and USB adapter	$25.00
195607	USB flash drive, 1 GB	$9.00
Extended Display Cable Length for Touch Only Models		
182600	Display cable for 7 in (500 NIT) touch-only, 5 ft length	$130.00
182601	Display cable for 7 in (500 NIT) touch-only, 10 ft length	$160.00
187489	Display cable for 7 in (1,000 NIT) touch-only, 10 ft length	$160.00
180027	Display cable for 12 in touch-only, 5 ft length	$160.00
180028	Display cable for 12 in touch-only, 10 ft length	$160.00
Extended Touch Cable Length for Touch Only Models		
180744	Touch cable for touch-only, 5 ft length	$105.00
180745	Touch cable for touch-only, 10 ft length	$105.00

Primary Component Parts

Part #	Description	Price
Displays		
163400	7 in 500 NIT display	$350.00
163399	7 in 1,000 NIT display	$450.00
182992	12 in 1,500 NIT display	$995.00
Boards		
179992	1280 main CPU board with fan plate	$1,100.00
199157	1280, CPU AC power, extruded aluminum enclosure (replacement)	$1,500.00
Power Supplies		
202512	AC power supply board	$180.00
202514	DC power supply board	$180.00
Overlays		
164121	Keypad, for panel and wall mount	$75.00
164120	Touchscreen, for panel and wall mount	$130.00
161731	Keypad, for universal	$75.00
161730	Touchscreen, for universal	$145.00
178498	Touchscreen, for 7 in touch-only panel mount	$295.00
176126	Touchscreen, for 12 in touch-only panel mount	$400.00
178161	Clear protective overlay display for 7 in display (pack of 5)	$63.00
178163	Clear protective overlay keypad for 7 in display (pack of 5)	$63.00

Cables and Receptacles
To have your option factory installed, please specify when placing your order.

Part #	Connector Type		Length	Price
USB Cables *(Connector is a male plug)*				
79074	**A** UNSEALED	**B** UNSEALED	2 m	$35.00
124700	**A** SEALED	**B** SEALED	3 m	$125.00
126477	**A** SEALED	**A** UNSEALED	3 m	$545.00
124701	**A** SEALED	**B** UNSEALED	3 m	$745.00
124702	**B** SEALED	**A** UNSEALED	3 m	$675.00
152434	**A** UNSEALED	**Micro A** UNSEALED	2 m	$55.00
USB Receptacles *(Receptacle is a socket)*				
176790 Panel Mount	**A** SEALED	**A** UNSEALED	0.75 m	$105.00
126476 Wall Mount	**A** SEALED	**A** UNSEALED	0.5 m	$125.00
172735 Universal	**A** SEALED	**A** UNSEALED	0.25 m	$90.00
Ethernet Cables				
72697	RJ-45 UNSEALED	RJ-45 UNSEALED	2 m	$40.00
124706	RJ-45 SEALED	RJ-45 SEALED	3 m	$625.00
124707	RJ-45 SEALED	RJ-45 UNSEALED	2 m	$125.00
Ethernet Receptacles *(Receptacle is a socket)*				
176789	RJ-45 SEALED		0.75 m	$145.00
172734	RJ-45 SEALED		0.5 m	$90.00
126353	RJ-45 SEALED		0.25 m	$125.00
Cable and Receptacle Accessories				
124694	Cover for sealed receptacles			$25.00
124689	Cover for flash driver mounts on sealed receptacle			$45.00

Unsealed Connectors

Type B   *Type A*

Sealed Connector   *Sealed Receptacle*

Backplate

Standard Features

- LCD display
- Membrane keypad for remote control functionality
- User-definable function keys for added versatility
- Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)
- Compatible with all ScaleCore™ based products including: MSI-7300 Dyna-Link 2, MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001 TranSend™, MSI-9600HT and MSI-6360

(Contact MSI for application consultation)

Specifications

Power:
Integral lithium-ion battery
Universal 115/230 VAC, 50/60 Hz battery charger (NA plug included)

Operating Time:
Up to 24 hours of continuous use (15 minute auto-shutoff with non-use)

Annunciators:
COZ, stable, low battery, peak, net, kg, kN, lb, M, ton, setpoint, function LEDs

Weight:
0.98 lb (445 g)

Keys/Buttons:
On/Off, zero (100%), tare, print and two user-defined keys for the following functions: peak hold, high resolution, total, view total, net/gross, unit switching

Display:
Six-digit 1.0 in (26.4 mm) LCD screen

Temperature:
Operating:
-4 °F to 140 °F (-20 °C to 60 °C)

Rating/Material:
NEMA Type 4, IP65

RF Radio Link:
2.4 GHz 802.15.4
Communicates with RF 3460, 4260, 7300, 7000 & 7001

RF Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

Connector:
Four-pin Turck connector for charging and RS-232 communication

Warranty:
One-year limited

Part Number/Price

Part #	Description	Est. Weight	Price
139381	MSI-8000 RF remote display	5 lb	$1,530.00

Options/Accessories

Part #	Description	Est. Weight	Price
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 RF remote display	3 lb	$180.00
149550	Universal 115/230 VAC 50/60 Hz (EC plug standard) battery charger for MSI 8000 RF remote display	1 lb	$180.00
150964	DB9 female serial interface cable for MSI-8000 RF remote display	1 lb	$220.00
151095	Audible alarm	—	$330.00

Dimensions

MSI-8000			
A	8.00 in (203 mm)	C	3.85 in (98 mm)
B	3.85 in (98 mm)	D	1.37 in (35 mm)

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MSI-8000HD
Digital Weight Indicator/RF Remote Display

Approvals

Standard Features

- Compatible with all ScaleCore™ based products
- LCD display
- Time and date
- Membrane keypad for remote-control functionality
- User-definable function keys for added versatility
- Swivel tilt stand

Dimensions

MSI-8000HD

A	5.09 in (129 mm)
B	8.98 in (228 mm)
C	1.35 in (34 mm)
D	1.63 in (41 mm)

With Tilt Stand

A	11.06 in (281 mm)
B	9.13 in (232 mm)
C	9.50 in (241 mm)
D	8.02 in (204 mm)
E	6.16 in (156 mm)
F	3.25 in (83 mm)
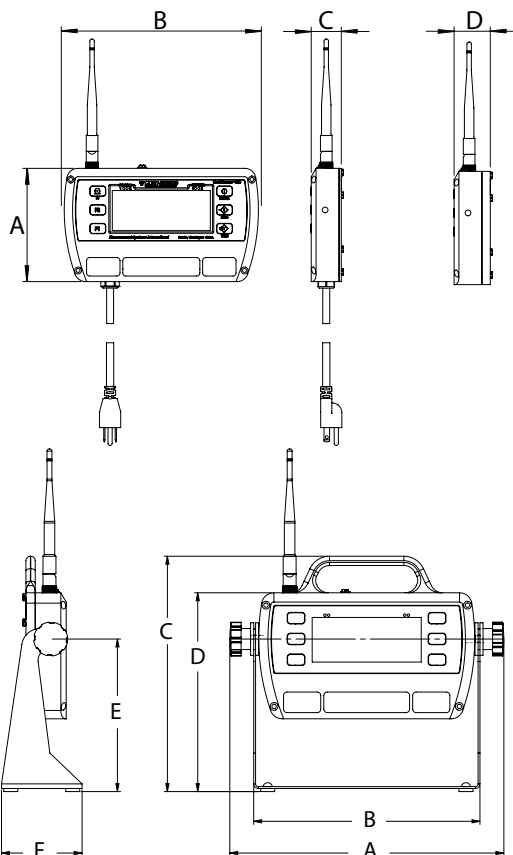
Options
(Contact MSI for application consultation)

- 18 to 72 VDC power
- Up to 8 configurable relay outputs
- Wi-Fi communications
- Wi-Fi indicators
- 802.15.4 Serial RF
- FHSS
- Wired Ethernet

Specifications

Power:
90 to 267 VAC, 9 to 36 VDC, 18 to 72 VDC, 120 to 300 VDC
Optional battery power module available

Excitation Voltage:
4.8 V current limited and over-voltage protected

RF Remote Channels:
Up to four remote sensors, monitored individually, in pairs or sum all (non-A/D version only)

Service Counters:
A/D version only

A/D Inputs:
Two independent or summing load cell inputs

Filtering:
Off, Low, Hi-1, Hi-2

RF Radio Link:
2.4 GHz 802.15.4
Compatible with all ScaleCore™ based products, including:
MSI-7300 Dyna-Link 2,
MSI-3460 Challenger 3,
MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001

RF Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Dual RS-232 communication ports

Annunciators:
Stable, COZ, Peak, kg, kN, lb, M, Ton, Setpoint, Function LEDs
Channels: 1, 2, 3, 4, TTL

Display:
Six-digit 1.0 in (26.4 mm) LCD

Units Displayed:
Pounds, kilograms, tons, metric tons, kilonewtons

Keys/Buttons:
On/Off, zero (100%), tare, print, and two user-defined keys for the following functions: peak hold, high resolution, total, view total, net/gross, units switching

Rating/Material:
Enclosure: NEMA Type 4, IP66 milled anodized aluminum with O-ring gaskets

Temperature:
Certified: 14 °F to 104 °F (-10° °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Warranty:
One-year limited

Approvals:
NTEP 15-110

Part Number/Price

Part #	Description	Est. Weight	Price
Indicator			
158427	Indicator, dual channel, 85 to 265 VAC	5 lb	$2,025.00
158428	Indicator, dual channel, internal battery	5 lb	$2,150.00
160478	Indicator, dual channel, 7 to 36 VDC	5 lb	$1,825.00
159380	Indicator, dual channel, 9 to 36 VDC	5 lb	$1,850.00
158425	Indicator, RF, dual channel, 85 to 265 VAC	5 lb	$2,050.00
158426	Indicator, RF, dual channel, internal battery	5 lb	$2,175.00
160477	Indicator, RF, dual channel, 7 to 36 VDC	5 lb	$2,050.00
159378	Indicator, RF, dual channel, 9 to 36 VDC	5 lb	$2,075.00
Remote Display			
153591	Remote display, RF, 85 to 265 VAC	5 lb	$1,675.00
154853	Remote display, RF, internal battery	5 lb	$1,825.00
160476	Remote display, RF, 7 to 36 VDC	5 lb	$1,625.00
159376	Remote display, RF, 9 to 36 VDC	5 lb	$1,650.00

Options/Accessories

Part #	Description	Price
155173	MSI-8000HD spare tilt stand option kit	$94.00
155193	MSI-8000HD Ethernet TCP/IP option kit wired	$475.00
162178	Antenna extension kit, 6 ft	$535.00
148624	MSI-8000HD serial RS-232 cable	$150.00
158779	MSI-8000HD two each coil relay option kit, 250 VAC/30 VDC 5 A or 100 VDC 0.4 A	$410.00
158780	MSI-8000HD two each solid state relay option kit, 60 V pk 2.7 A	$410.00
158781	MSI-8000HD two each solid state relay option kit, 200 V pk 0.9 A	$420.00
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000HD battery powered device	$180.00
149550	Universal 115/230 VAC 50/60 Hz (international plugs) battery charger for MSI-8000HD battery powered device	$180.00
171203	Audible alarm kit	$390.00
176963	Serial print cable (for GoDex printer)	$175.00
Relays		
172490	Expanded relay kit, four-channel, 12 A 5 V, latching relays	Consult
172492	Expanded relay kit, four-channel, 12 A 5 V, momentary relays	Consult
Consult	Expanded relay kit, four-channel, 0.9 A 200 V pk, AC/DC solid state relays	Consult
172495	Expanded relay kit, eight-channel, 12 A 5 V, momentary relays	Consult
172500	Expanded relays option kit, four-channel, 3 A, 60 V pk solid state Form C relays	Consult
172501	Expanded relays option kit, eight-channel, 3 A 60 V pk, solid state Form C relays	Consult
172502	Expanded relays option kit, eight-channel, 0.9 A 200 V pk, solid state Form C relays	Consult
171676	Expanded relays option kit, eight-channel, 12 A 5 V, latching relays	Consult

INDICATORS / CONTROLLERS

MSI-8004HD
Digital Weight Indicator/RF Remote Display

Approvals

NTEP

Measurement Canada Approved

Standard Features

- Multicolor LED display
- Backlit membrane keypad for user functioning and controls
- Tilt bracket included
- Color changing display (via setpoints)

Options

(Contact MSI for application consultation)

- Expanded relay outputs
- Battery pack for mobile operation
- Second radio module for additional network connectivity
- Remote display 8 to 32 VDC
- Remote display 5 VDC
- Remote display 9 to 36 VDC
- Indicator 8 to 32 VDC
- Wired Ethernet
- Single and dual channel analog output
- Additional antenna kits
- Extended relay option kits

Part Number/Price

Part #	Description	Price
Indicator		
221177	AC Power (85 to 264 VAC), multi-color display, RF	$2,075.00
221183	AC Power (85 to 264 VAC), multi-color display, RF, Instant power-on	$2,050.00
221179	DC Power (9 to 36 VDC), multi-color display, RF	$2,075.00
221181	DC Power (5 VDC), multi-color display, RF	$2,225.00
Remote Display		
221176	AC Power (85 to 264 VAC), multi-color display, RF	$2,075.00
221180	External battery (Li-ion 5V/3A), multi-color display, RF	$2,025.00

Specifications

Power:
90 to 267 VAC, 9 to 36 VDC, 18 to 72 VDC, 120 to 300 VDC

Excitation Voltage:
4.8 V current limited and over-voltage protected

Functions:
Peak hold, high resolution, total, view total net/gross, units switching

Units:
Pounds and kilograms

Channels:
1, 2, 3, 4, TTL

RF Remote Channels:
Up to 4 remote sensors, monitored individually, in pairs or sum all (non-A/D version only) (when used with TranSend™)

Service Counters:
A/D version only

A/D Inputs:
Two independent or summing load cell inputs

Relays:
Two 5 V coil, 250 VAC, 5 A relays

Filtering:
Off, Low, Hi-1, Hi-2

RF Radio Link:
2.4 GHz 802.15.4, optional second channel for Serial RF, 802.11 Wi-Fi

RF Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

Communication Ports
Two RS-232 hard wired communication ports

Annunciators:
Stable, COZ, BT, RF, TTL, NET, kg, lb

Display:
Six-digit, 1.5 in (38 mm) LED display with red/green/orange coloring

Keys/Buttons:
On/Off, Zero, Tare, Print and two user-defined keys

Temperature:
Certified: 23 °F to 104 °F (-5 °C to 40 °C)
Operating: -40 °F to 140 °F (-40 °C to 60 °C)

Rating/Material:
NEMA Type 4, IP66 milled anodized aluminum

Warranty:
One-year limited

Approvals:
NTEP 17-036
Measurement Canada AM-6068

Options/Accessories

Part #	Description	Price
162178	Antenna extension kit, 6 ft	$535.00
197013	Antenna extension kit, 20 ft	$575.00
199105	Audible alarm not compatible with battery versions	Consult
22436	Cable assembly, DB9F to bare wires, 6 in, Gen 1	$70.00
148624	Cable assembly, RS232 DB9, Gen 2	$150.00
183437	Battery, 5V Li-ion battery with USB power ports. Output 5 V/3.0 A per port (6.0 A max) rate, 2 A per port (4 A if both ports are used).	$245.00
187425	8004 option kit, Wi-Fi with TNC connector	$210.00
187424	8004 option kit, 2nd Xbee® with TNC connector	$220.00
223594	Option Kit, Dual Analog Output, 8004HD	$625.00
224817	Ethernet (forward module only)	$250.00

Dimensions

MSI-8004HD			
With Tilt Stand			
A	11.10 in (282 mm)	E	9.13 in (232 mm)
B	8.76 in (223 mm)	F	6.16 in (156 mm)
C	8.02 in (204 mm)	G	3.25 in (83 mm)
D	5.09 in (129 mm)	H	1.66 in (42 mm)
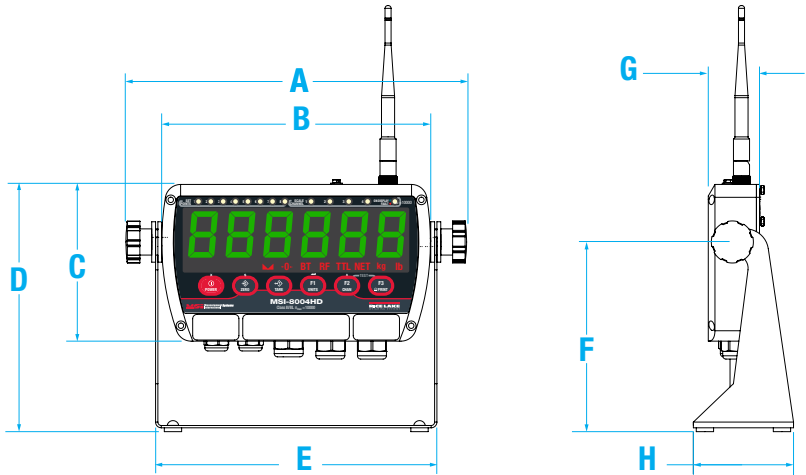
INDICATORS / CONTROLLERS

MSI Scoreboards Wireless RF

Featuring LaserLight2™ Remote Displays

- Auto Learn mode of communication protocols
- Hold displayed weight (demand input)
- Software selectable standstill mode for no updates while in motion
- Durable weather-tight IP66 enclosure
- Adjustable day/night intensity
- Non-glare contrast filtered lens
- Mirror (reverse image) feature
- RS-232, 20 mA and RS-485 communications
- Auto sensing 115/230 VAC power supply
- PEMs for VESA flat-wall mount or side-mounting flange available
- Polyethylene breather vent inhibits internal moisture buildup
- Compatible with: MSI-7300 Dyna-Link 2, MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001 TranSend™, MSI-9600HT, MSI-6360, MSI-8000HD and MSI-8004HD

(Contact MSI for application consultation)

Standard Features

- Tilt mounting bracket
- Integrated data repeater
- Six high-intensity red digits (double-row discrete LED)

Specifications

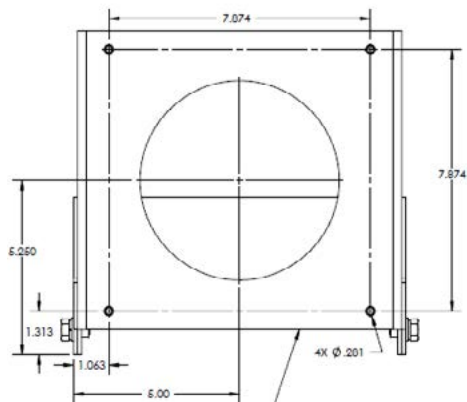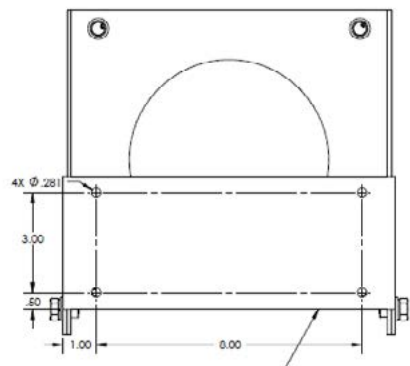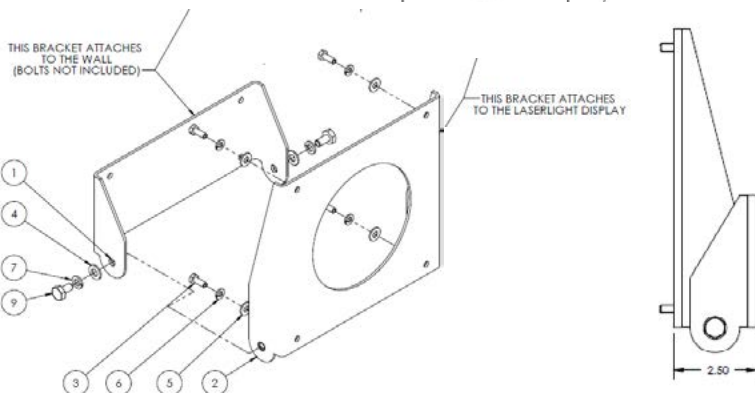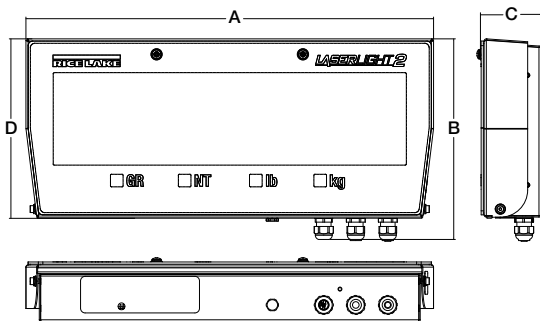**Display:**
Six-digit long-life LED, 4 in or 6 in

Power:
AC/DC power supply 85 to 265 VAC, 47 to 440 Hz/130 to 300 VDC

Rating/Material:
NEMA Type 4, IP66

Radio Link:
Direct sequence spread spectrum at 2.4 GHz

Radio Link Effective Range:
Typically, 100 to 300 ft, line of sight; for longer range consult factory

Temperature:
Operating:
-40 °F to 120 °F (-40 °C to 49 °C)

Standard Antenna:
1/2 wave 2 dBi, articulated

Warranty:
One-year limited

Echo Data Output:
RS-232

Part Number/Price

Part #	Description	Est. Weight	Price
178004	LaserLight2, 4 in with ScaleCore RF and tilt bracket	20 lb	$3,350.00
178006	LaserLight2, 6 in with ScaleCore RF and tilt bracket	25 lb	$3,850.00
178341	Laserlight2, 4 in with tilt bracket	20 lb	$2,650.00
178342	Laserlight2, 6 in with tilt bracket	20 lb	$3,025.00

Options/Accessories

Part #	Description	Price
162178	Antenna extension kit, 6 ft	$535.00
197013	Antenna extension kit, 20 ft	$575.00
178318	Replacement tilt bracket, LaserLight2	$275.00

Dimensions

MSI Scoreboards Wireless RF							
22 in enclosure (4 in model)				**31 in enclosure (6 in model)**			
A	22.28 in (565 mm)	C	3.28 in (85 mm)	A	30.63 in (780 mm)	C	3.73 in (95 mm)
B	10.96 in (280 mm)	D	9.80 in (250 mm)	B	13.94 in (355 mm)	D	12.77 in (325 mm)

Standard Features

- Works with any basic digital weight indicator
- Excitation to load cell(s) provided by the transmitter, not the indicator
- Each transmitter/receiver set is individually paired
- Serial communication cable included

Options
(Contact MSI for application consultation)

- Multiple antenna selections
- Analog output
- Additional VDC input power

Specifications

Power:
85 to 265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16 × 350 ohm or 32 × 700 ohm load cells

Standard Antenna:
1/2 wave 2dBi, articulated

Frequency:
Spread spectrum at 2.4 GHz, 802.15.4

Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Full duplex RS-232

Circuit Protection:
RFI, EMI, ESD protection

Temperature:
Operating:
-40 °F to 185 °F (-40 °C to 85 °C)

Rating/Material:
IP68, die-cast aluminum enclosure

Additional RF Options:
Wi-Fi
802.15.4
FHSS

Warranty:
One-year limited

Part Number/Price

Part #	Description	Est. Weight	Price
MSI-7000			
227549	Four-channel, transmitter, 85-265 VAC, load cell, w/3 relays	2 lb	$1,425.00
227550	Four-channel, receiver, 85-265 VAC, digital, w/3 relays	2 lb	$1,275.00
MSI-7001			
230905	Single-channel, transmitter, 85-265 VAC, load cell input	2 lb	Consult
230951	Single-channel, receiver, 85-265 VAC, mV output	2 lb	Consult
230952	Single-channel, receiver, 85-265 VAC, RS232 output	2 lb	Consult

Options/Accessories

Part #	Description	Price
143531	Power cord, 6 V SLA battery charger EU	$33.00
143533	Power cord, 6 V SLA battery charger, Australia	$54.00
143534	Power cord, 6 V SLA battery charger, UK	$49.00
162178	Antenna extension kit, 6 ft coax cable	$535.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector, MSI-7001	$220.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector, MSI-7001	$180.00
145085	RS-232 serial cable, unterminated, MSI-7000	$145.00
148624	Cable assembly, RS232/485 to DB9, used for setup and calibration	$150.00
144400	Cable assembly, 4 pin, female, 4 meter, mV	$110.00
145084	Cable assembly, 4 pin, female, 2 meter, mV	$64.00
162177	Cable assembly, 4 pin, male, 2 meter, A2D cable, MSI-7001	$145.00
162184	Connector, M12, 4 pin, straight, mV, MSI-7001	$65.00
162185	Connector, M12, 4 pin, right-angle, mV, MSI-7001	$65.00

INDICATORS / CONTROLLERS

MSI ScaleCore Webserver

Wireless Network Router

Approvals

Part Number/Price

Part #	Description	Price
207943	ScaleCore Webserver, 5 VDC and PoE	$4,025.00
209704	ScaleCore Webserver, 7 to 14 VDC and PoE	$4,025.00
210817	ScaleCore Webserver, 85 to 265 VAC and PoE wall cube	$4,025.00

Options/Accessories

Part #	Description	Price
Consult	Extended-range antennas	Consult
213559	MSI-8000 handheld remote display with Wi-Fi, (only to be used with MSI ScaleCore Webserver systems and applications)	$1,650.00
224240	Webserver Access Point, more than 8 devices	$1,400.00

* Other MSI Wi-Fi products available based on application requirements.

Standard Features

- Display and control multiple ScaleCore based scales, indicators, remote displays and receivers through network connected devices using a web browser, including cell phones, tablets and PCs
- Capable of functioning either with an existing Wi-Fi network or as its own Wi-Fi router
- Can be powered by a dedicated power input or directly through the Ethernet cable where PoE (Power over Ethernet) is supported
- RS-232 communications at up to 460 Kbps
- Scale / load cell summing
- Tiered login to limit scale functionality for different levels of users

(Contact MSI for application consultation)

Specifications

Power:
5 to 6 VDC, 7 to 14 VDC, 85 to 265 VAC, PoE

Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

Minimum System Requirements:
Will display on any device with a web browser supporting HTML 5
Connected ScaleCore based MSI scales and indicators are required to have the optional Wi-Fi radio modul

Connectivity:
Wi-Fi 2.4 GHz IEEE 802.11g
Gigabit Ethernet
2 × USB 2.0 Interface
RS-232 Serial

Status Annunciators:
Units (lb, kg, short tons (tn), metric tons (t), (NONE) gross/net, motion, center of zero

Enclosure:
IP65, aluminum black powder coated
(excludes 85 to 265 VAC model)

Temperature:
Operating:
14 °F to 104 °F (-10 °C to 40 °C)

Warranty:
One year limited

Approvals:
NTEP 21-098 Classes III and IIIL at 10,000d

Optional Wi-Fi router or access point
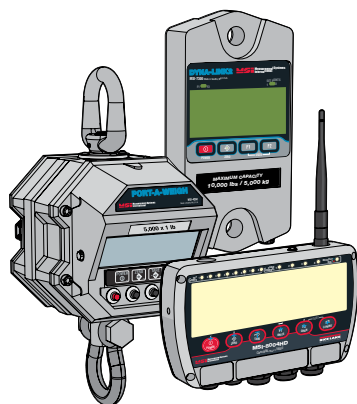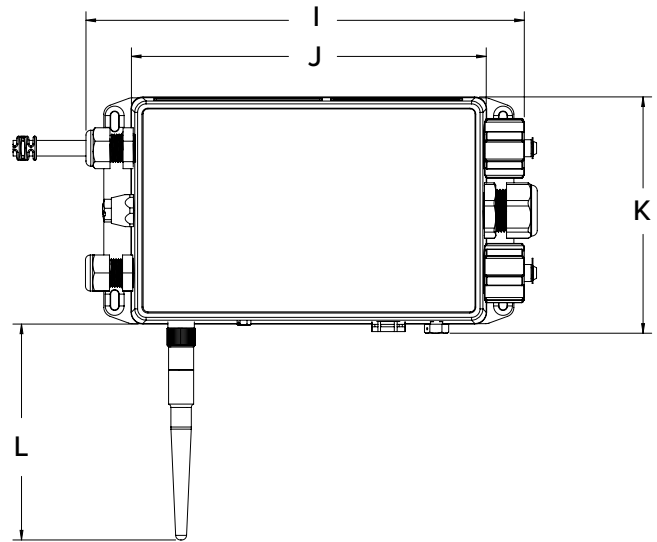
MSI ScaleCore and Wi-Fi enabled device

MSI ScaleCore Webserver

Display multiple ScaleCore devices using a web browser

INDICATORS / CONTROLLERS

Dimensions

ScaleCore Webserver			
A	8.54 in (217 mm)	H	2.23 in (57 mm)
B	8.09 in (205 mm)	I	9.13 in (232 mm)
C	4.70 in (119 mm)	J	7.40 in (188 mm)
D	3.97 in (101 mm)	K	4.90 in (124 mm)
E	3.47 in (88 mm)	L	4.50 in (114 mm)
F	0.17 in (4 mm)	M	4.70 in (119 mm)
G	0.25 in (6 mm)		
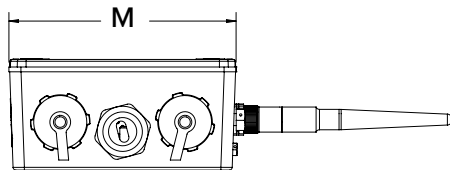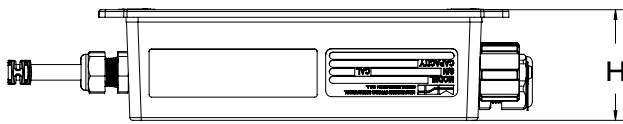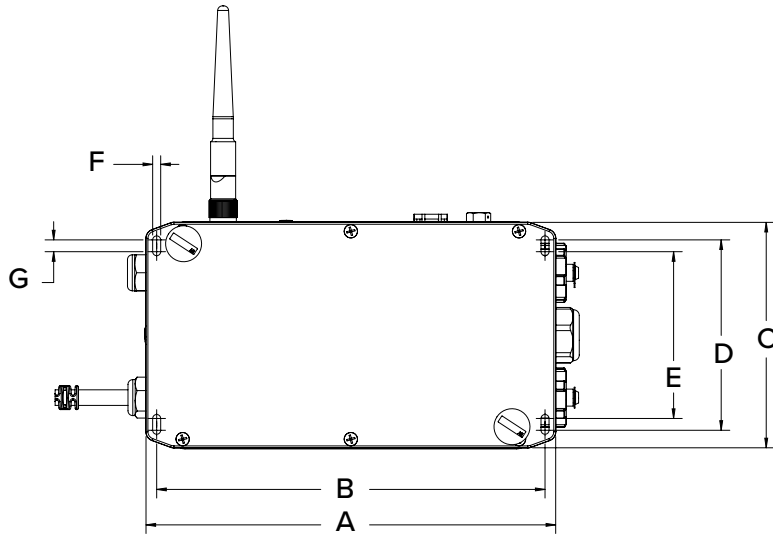
INDICATORS / CONTROLLERS
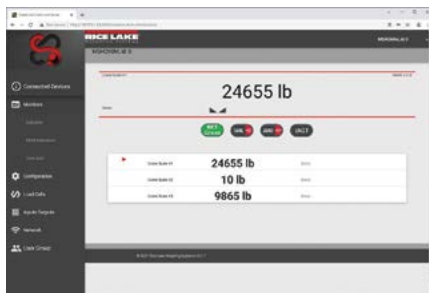
Computer Screenshot
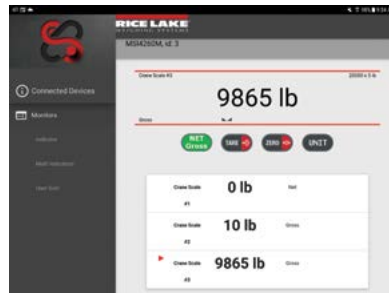
Tablet Screenshot
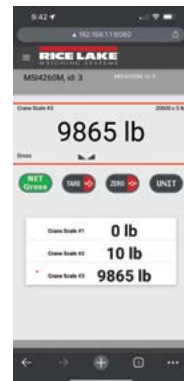
Phone Screenshot

Rugged Remote
Remote Control

Standard Features

- Handheld
- Compatible with: MSI-7300, Dyna-Link 2, MSI-7000 Series and all MSI Crane Scales
- Four button interface: Power, zero, tare, function

Specifications

Power:
Battery operated, three (3) AAA alkaline batteries

Function:
Power: turns unit on/off
Zero: zeros applied load up to 100% of capacity (limited range in NTEP/OIML configurations)
Tare: tares applied load and displays weight in net mode
User: programmable as test, units, net/gross, total, peak hold and setpoints

Radio Effective Range:
Typically 100 to 300 ft line of sight

Warranty:
One-year limited

Approval:
CE Listed

Approvals

$C\epsilon$

Part Number/Price

Part #	Description	Est. Weight	Price
173014	MSI Rugged Remote control, non-CE approved	3 lb	$375.00
211841	MSI Rugged Remote control, CE approved	3 lb	$375.00

INDICATORS / CONTROLLERS

SCT1100-AN with Analog Output

SCT-1100-AN in Plastic Enclosure

Specifications

Power:
12/24 VDC

Power Consumption:
70 mA min to 100 mA max

Excitation Voltage:
5VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum

A/D Sample Rate:
Four channel A/D 24-bit sigma-delta conversion, up to 200 conv./sec. auto select

Resolution:
Internal: 1,500,000 counts
Display: 800,000

Digital I/O:
Two inputs: 12/24 VDC
Two outputs: 150 mA 48 VAC/150 mA 60 VDC

Serial Ports:
Modbus RTU or ASCII selectable/bidirectional (both ports)
(1) RS-485 for connection to a PC or weight repeater
(1) RS-232 for connection to a PC or printer

Analog Output (if equipped):
Opto isolated, 16-bit
0 to 20mA, 4 to 20mA (Maximum 350 ohm)
0 to 5VDC, 0 to 10VDC (Minimum 10,000 ohm)

Annunciators:
Net, center of zero, stability

Display:
Six-digit (10 mm), red LED

Keys/Buttons:
Five key, membrane panel, tactile feel Zero (Down), Tare (Up), Mode (Right), Print (Enter), C (On/Off)

Dimensions:
(L × W × H)
4.17 × 3.54 × 2.28 in
(106 × 90 × 58 mm)

Temperature:
5 °F to 104 °F (-15 °C to 40 °C)

Humidity:
85% non-condensing

Rating/Material:
Enclosure: NEMA Type 4, plastic
Clear cover: six PG9 cord grips

Warranty:
One-year limited

Approvals:
NTEP 20-046
Measurement CanadaAM-6165C
OIML R76/2006-A-GB1-19.17
UKCA Marked
cULus Listed

Approvals

Standard Features

- Up to four independent scales or four load cell inputs
- Quick menu for real and theoretical calibration
- Red LED display
- DIN rail mountable
- Configurable calibration and setup parameters from keyboard
- Calibration using linearization points
- Reading of the net, gross and tare weights, clearing, semi-automatic and preset tare, scale switch, setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, setting of APW in counting mode, digital input for key press
- Modbus RTU or ASCII protocol
- Easy configuration with Rice Lake Tools software

Part Number/Price

Part #	Description	Est. Weight	Price
202101	Indicator, SCT-1100-AN four load cell input with Analog Output	1 lb	$560.00
197011	Indicator, SCT-1100-AN four load cell input with Analog Output in plastic enclosure	1 lb	$675.00

NOTE: PN 182588 is superseded by 202101

Options/Accessories

Part #	Description	Est. Weight	Price
188483	SCT-1000 converter RS-232/485 to Ethernet TCP/IP and Modbus TCP. Does not have an A/D	1 lb	$400.00
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00

SCT-1000
Serial to Ethernet converter

INDICATORS / CONTROLLERS

SCT-2200
Signal Conditioning Transmitter

SCT2200 pictured with optional EtherNet/IP module

Approvals

NTEP · Measurement Canada Approved · OIML · CE · UKCA · cULus LISTED

Standard Features

- HUB mode connects up to 16 transmitters to one fieldbus
- Two RS-485 port for "daisy-chain" network connection
- Quick menu for real and theoretical calibration
- Remote access through web browser for weight monitoring and calibration over EtherNet/IP™, PROFINET and Modbus TCP network
- Red LED display
- DIN rail mountable
- Calibration using linearization points
- Reading of the net, gross and tare weights, clearing, semi-automatic and preset tare setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, simulation of key pressure, Modbus RTU or ASCII protocol
- Printer management on second serial port available
- Multi-range function allows for subdividing the scale capacity in two, each up to 3,000 divisions
- Easy configuration with Rice Lake Tools software

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
202103 *	Indicator, SCT-2200 for scale input to be used with fieldbus module	1 lb	$375.00
202104 *	Indicator, SCT-2200-AN with analog output	1 lb	$500.00
Fieldbus			
182592	Fieldbus, SCT-2200, PROFINET module	1 lb	$625.00
194343	Fieldbus, SCT-2200, Ethernet TCP/IP and Wi-Fi	1 lb	$620.00
182593	Fieldbus, SCT-2200, PROFIBUS® module	1 lb	$425.00
182591	Fieldbus, SCT-2200, EtherNet/IP™ module	1 lb	$625.00
182596	Fieldbus, SCT-2200, DeviceNet® module	1 lb	$625.00
182598	Fieldbus, SCT-2200, EtherCAT module	1 lb	$620.00
182597	Fieldbus, SCT-2200, CANopen module	1 lb	$620.00
196694	Fieldbus, SCT-2200, Modbus TCP module	1 lb	$620.00
182599	Cable with RJ45 plugs, 6 in length	1 lb	$15.00
212772 **	Fieldbus, SCT-2200, PROFIBUS module	1 lb	$425.00

NOTE: PN 182587 is superseded by 202103 and PN 182589 is superseded by 202104.
***How to Order the SCT-2200 for use with fieldbus module**
Order 1 RJ45 cable for every Scale module connected to a Fieldbus module.*
*** Compatible with 682 indicator*

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00

Specifications

Power:
12/24 VDC

Power Consumption:
70 mA min to 100 mA max

Excitation Voltage:
5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum

A/D Sample Rate:
One channel A/D 24-bit sigma-delta conversion, up to 200 conv/sec. auto select

Resolution:
Internal: 1,500,000 counts
Display: 800,000

Digital I/O:
Two inputs: 12/24 VDC
Two outputs: 150 mA 48 VAC/150 mA 60 VDC

Communication Ports:
(1) RS-485, (1) RS-232
Analog output (if equipped):
Opt isolated, 16-bit
0-20 mA, 4-20 mA (Maximum 350 ohm)
0-5 VDC, 0-10 VDC (Minimum 10,000 ohm)

Annunciators:
Net, center of zero, stability

Display:
Six-digit 0.31 in (8 mm), red LED

Keys/Buttons:
Five key, tactile feel
Zero (Down), Tare (Up), Mode (Right), Print (Enter), C (On/Off)

Dimensions:
(L × H × D)
4.72 × 4.52 × 0.98 in
(120 × 115 × 25 mm)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Humidity:
85% non-condensing

Rating/Material:
NEMA Type 1 plastic pluggable connectors

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
NTEP 20-046
Measurement Canada AM-6165C
OIML R76/2006-A-GB1-19.17
UKCA Marked
cULus Listed

Standard Features

- Powers up to six (350 ohm) load cells in parallel
- Analog amplifier and transmitter
- Analog output: 0-20 mA, 4-20 mA, 0-10 V
- Mounting on Omega/DIN rail for back panel or junction box

Specifications

Power:
Input: 20 to 28 VDC

Power Consumption:
8 W

Excitation Voltage:
10 VDC, 170 mA, 6 × 350 ohm load cells

Analog Signal Input Range:
3.5 to 24 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum
1.0 µV/graduation recommended

A/D Sample Rate:
300 Hz

System linearity:
± 0.01% full scale

Analog Output (if equipped):
Opto isolated
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC (min 10,000 ohm)

Dimensions:
(L × W × H)
4.56 × 3.72 × 2.4 in
(114 × 93 × 60 mm)

Temperature:
Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Humidity:
85% non-condensing

Rating/Material:
DIN rail mount: NEMA Type 1

Weight:
0.5 lb (0.2 kg)

Warranty:
One-year limited

Approvals:
UKCA Marked

Approvals

UK CA

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
188725	Indicator, SCT-3300 four load cell input with Analog Output	1 lb	$400.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00

INDICATORS / CONTROLLERS

SCT-1PX
Transmitter with Integrated Fieldbus and Web Server

Standard Features

- Integrated web server allows complete diagnostics, calibration and remote configuration
- Real-time warning of any faults or disconnections of the load cell
- Configuration and calibration through Rice Lake Tools, XSpeed software or display navigation
- Power supply circuit with protections against overloads, polarity reversal and short circuits, specific for industrial environments
- Micro-USB communication and configuration port accessible from display for quick programming, diagnostics and data backup
- All scale data and adjustments are available through integrated fieldbus with up to 120 updates per second
- Removable terminal blocks to simplify wiring in the electrical panel
- Modbus RTU protocol integrated, up to 110 updates per second

Part Number/Price

Part #	Description	Est. Weight	Price
229189	SCT1PX-AN		$500.00
229190	SCT1PX-PRONET		$750.00
229191	SCT1PX-ETHIP		$750.00
229192	SCT1PX-MODTCP		$750.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Specifications

Power:
12 to 24 VDC

Power Consumption:
5 W

Excitation Voltage:
5 VDC, 230 mA
up to 16 × 350 ohm load cells

Analog Signal Input Range:
±39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum

A/D Sample Rate:
24-bit A/D
Single channel up to 4,800 Hz

Resolution:
Internal: 4,000,000 counts
Display: up to 800,000
Up to 8 linearization points

Digital I/O:
Two inputs: 12/24 VDC
Two outputs*: 500 mA, up to 48 VAC or 60 VDC
*(up to six with option for analog version only)

Serial Ports:
One micro-USB port (device) for PC configuration
One RS-485
EtherNet /IP™ or PROFINET IO or Modbus TCP
(Fieldbus version)

Analog Output (if equipped):
Opt. isolated, 16-bit
0 to 20 mA, 4 to 20 mA (maximum 350 ohm)
0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:
Nine LEDs

Display:
Six-digit 0.56 in (14.2 mm), red LED

Keys/Buttons:
Five tactile keys
Zeroing, Tare, function mode, manual data printing/
sending, On/Stand-by

Dimensions:
(L × W × H)
(100 × 53 × 136 mm)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
85% RH, non-condensing

Rating/Material:
Aluminum IP65

Warranty:
One-year limited

Approvals:
CE-M EN 45501
UL

Standard Features

- Load cell status diagnostics
- USB port for quick programming
- Integrated fieldbus and web server for configuration, diagnostics and data backup
- Process up to 4800 weight readings per second. The high speed allows an extremely accurate weight filtering even with weighing being performed in milliseconds.
- Up to 120 updates per second on Fieldbus
- New power supply circuit of the load cells (up to 16) for a better weighing stability
- Power supply circuit with protections against overloads, polarity reversal and short circuits, specific for industrial environments
- Micro-USB communication port for configuration, diagnostics and data backup is available on all versions
- Modbus RTU protocol integrated on all versions, up to 110 updates per second
- Real-time warning of any faults or disconnections of the load cell
- The integrated web server allows full diagnostics, calibration and remote configuration of the weight transmitter from an Ethernet network
- Calibration via theoretical (mV/V), with sample weights, web server or xSpeed software tool
- Easy configuration with Rice Lake Tools software

Optional xSpeed Software

- Customization of the weighing filter, to maximize the speed and accuracy in static and dynamic applications
- Graphical weighing analysis for the identification of mechanical disturbances and vibrations. Oscilloscope function for system diagnostics and filter optimization.

Part Number/Price

Part #	Description	Est. Weight	Price
216820	SCT-1SX-AN weight transmitter and analog output for DIN rail mount with digital I/O 2 IN and 4 OUT		$895.00
229550	SCT-1SX-ETHIP weight transmitter and EtherNet/IP™ port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		$1,295.00
216821	SCT-1SX-PRONET weight transmitter and PROFINET port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		$1,095.00
216823	SCT-1SX-MODTCP weight transmitter and Modbus TCP port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		$1,295.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Specifications

Power:
12 to 24 VDC, 5 W

Power Consumption:
70 mA min to 100 mA max

Excitation Voltage:
5V, 250 mA, 16 × 350 ohm load cells

Analog Signal Input Range:
±39 mV

Analog Signal Sensitivity:
High resolution 0.01 µV/d
Legal for trade 0.3 µV/e

A/D Sample Rate:
Up to 4800 Hz

Resolution:
Internal: 1,500,000 counts
Display: 800,000
Legal for Trade divisions
Up to 10,000e or multi-field 2 × 3,000e

Digital I/O:
Two inputs, configurable: 12 to 24 VDC
Four outputs, configurable: 150 mA 48 VAC/150 mA 60 VDC

Communication Ports:
One RS-485, one RS-232,
one micro-USB port (device)
Serial port update rate: up to 1600 Hz
Fieldbus update rate: up to 120 Hz

Analog Output (if equipped):
OPTO isolated, 16-bit
0 to 20 mA, 4 to 20 mA (maximum 350 ohm)
0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:
Net, center of zero, stability

Display:
Six-digit (8 mm), red LED

Keys/Buttons:
Five key, membrane panel
Zero (down), Tare (up), Mode (right), Print (enter), C (on/off)

Dimensions:
(L × W × H)
4.72 x 0.9 x 4.0 in
(120 x 23 x 112 mm)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
85% non-condensing

Rating/Material:
Enclosure: ABS plastic

Warranty:
One-year limited

Approvals:
CE-M EN 45501
2014/30/EU EMC
2014/35/EU LVD
2011/65/EU RoHS
OIML R61 - MID
OIML R76

INDICATORS / CONTROLLERS

SCT-4X
Integrated Fieldbus Transmitter

Standard Features

- Manage up to four load cells (one scale) or four scales with load cell feed circuit for greater weighing stability
- Process to 2,600 weight readings per second for single-channel
- Integrated web server allows complete diagnostics, calibration and remote configuration (not available on AN models)
- 14.2 mm display with new configuration menu to simplify calibration and configuration
- All data and adjustments of each scale are available through integrated fieldbus with up to 120 updates per second
- Frontal micro-USB communication port for configuration, diagnostics and data backup
- Removable terminal blocks to simplify wiring in the electrical panel
- RS-485 communication port always available on all versions
- Power supply circuit with protections, specific for industrial environment

Optional xSpeed Software

- Customization of the weighing filter, to maximize the speed and accuracy in static and dynamic applications
- Graphical weighing analysis for the identification of mechanical disturbances and vibrations
- Oscilloscope function for system diagnostics and filter optimization

Specifications

Power:
12 to 24 VDC

Power Consumption:
5 W

Excitation Voltage:
5 VDC, 230 mA
up to 16 × 350 ohm cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum

A/D Sample Rate:
24-bit A/D
Single channel up to 2,600 conv/sec
4 channels up to 100 conv/sec

Resolution:
Internal: 3,000,000 counts
Display: up to 800,000
Up to 8 linearization points

Digital I/O:
Two inputs: 12/24 VDC
Two outputs: 150 mA 48 VAC/ 150 mA 60 VDC

Communication Ports:
1 Micro-USB port (device) for PC configuration
(1) RS-485, (1) RS-232

Analog Output (if equipped):
OPTO isolated, 16-bit
0 to 20 mA, 4 to 20 mA (maximum 350 ohm)
0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:
Nine LEDs

Display:
Six-digit 0.31 in (8 mm), red LED

Keys/Buttons:
Five tactile keys
Zeroing, Tare, function mode, manual data printing/sending, on/stand-by

Dimensions:
(L × W × H)
4.17 × 2.20 × 4.64 in
(106 × 56 × 118 mm)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
80% RH, non-condensing

Rating/Material:
NEMA Type 1 plastic pluggable connectors
ABS

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
CE-M EN 45501

Part Number/Price

Part #	Description	Est. Weight	Price
216824	SCT-4XAN high speed weight transmitter and analog output for DIN rail mount with digital I/O, 2 IN, 2 OUT, keypad, LED display (does not include web server)		$940.00
216825	SCT-4X-ETHIP high speed 4 channel weight transmitter and EtherNet/IP™ port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		$1,175.00
216826	SCT-4X-MODTCP high speed 4 channel weight transmitter and Modbus TCP port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		$1,155.00
216827	SCT-4X-PRONET high speed 4 channel weight transmitter and PROFINET port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		$1,125.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Dimensions

SCT-4X					
A	4.17 in(106 mm)	E	1.77 in (45 mm)	I	0.20 in (5 mm)
B	1.77 in (45 mm)	F	1.30 in (33 mm)	J	0.59 in (15 mm)
C	3.54 in (90 mm)	G	0.54 in (13.7 mm)	K	0.39 in (10 mm)
D	1.38 in (35 mm)	H	2.28 in (58 mm)		

SCT-10 in Plastic Enclosure

Approvals

Standard Features

- Converts digital weight to analog output
- Sums four input channels in parallel
- Theoretical calibration, real-weigh calibration, linearity calibration
- Push-button or preset tare
- Full-scale analog output with zero setting and PLC correction of analog signal
- Displays weight, configuration, calibration and error conditions
- DIN-rail mounting, suitable for back panel
- Two digital inputs, two digital outputs
- Supports ASCII or Modbus RTU protocols

Part Number/Price

Part #	Description	Est. Weight	Price
129393	SCT-10 converter with Analog Output	1 lb	$585.00
129394	SCT-10 converter with Analog Output in enclosure	1 lb	$760.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00
131129	Installation manual	1 lb	$25.00
199687	DIN rail clip right & left end clamp		$11.00

Specifications

Power:
Input: 12 to 24 VDC

Power Consumption:
5 W

Excitation Voltage:
5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:
± 19.5 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum
1.0 µV/graduation recommended

A/D Sample Rate:
80 Hz

Resolution:
Internal: 16,000,000 counts
Display: 999,999

System Linearity:
± 0.01% full scale

Digital I/O:
2 inputs 5-24 VDC, 2 outputs
24 VDC/60 mA
N.O. or N.C. (solid state)

Communication Ports
RS-485 or RS-232 simplex supports
up to 115,200 bps

Analog Output:
Opto isolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC, -10 to 10 VDC,
5 to 5 VDC, (min 10 k ohm)

Annunciators:
Net, center of zero, stability, kg, g, lb

Display:
0.3 in (8 mm), six-digit, seven- segment LED

Keys/Buttons:
4-key membrane panel, tactile feel
Zero, Tare, Print, Menu, Escape,
Left and Up Navigation, Enter

Dimensions:
(L × W × H)
DIN Rail Mount: 4.84 × 3.62 × 1.96 in
(123 × 92 × 50 mm)
Enclosure: 6.69 × 5.51 × 3.74 in
(170 × 140 × 95 mm)

Temperature & Humidity:
Operating Temperature:
-4 °F to 140 °F (-20 °C to 60 °C)
Humidity: 85% non-condensing

Rating/Material:
DIN rail mount: NEMA Type 1
Enclosure: NEMA Type 4/IP67, plastic
Clear cover: six PG9 cord grips

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
cULus Recognized

INDICATORS / CONTROLLERS

SCT-20

Signal Conditioning Transmitter

Approvals

Standard Features

- Space saving, vertical shape with DIN-rail mounting
- Displays weight, configuration, calibration and error conditions
- Theoretical calibration, real-weigh calibration, linearity calibration
- Push-button or preset tare
- Converts digital weight to analog output or optional DeviceNet® or PROFIBUS® or EtherNet/IP™ protocol
- Supports ASCII or Modbus RTU protocols
- Full-scale analog output with zero setting and PLC correction of analog signal
- Bit swapping selection for little endian and big-endian format
- Two digital inputs, three digital outputs
- One serial port, RS-232 transmit only, or RS-485 half-duplex connection

Part Number/Price

Part #	Description	Est. Weight	Price
129396	SCT-20 converter with Analog Output	1 lb	$600.00
129397	SCT-20 converter with DeviceNet®	1 lb	$725.00
129558	SCT-20 converter with PROFIBUS® DP	1 lb	$785.00
129398	SCT-20 converter with EtherNet/IP™	1 lb	$1,000.00
132534	SCT-20 converter with Ethernet TCP/IP	1 lb	$1,055.00
156903	SCT-20 converter with Modbus TCP	1 lb	$1,000.00
131128	Installation manual	1 lb	$25.00

EtherNet/IP and Modbus output changed to Dual Port in 2019.

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply.	1 lb	$160.00

Specifications

Power:
Input: 12 to 24 VDC

Power Consumption:
5 W

Excitation Voltage:
5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum
1.0 µV/graduation recommended

A/D Sample Rate:
300 Hz

Resolution:
Internal: 16,000,000 counts
Display: 999,999

System linearity:
± 0.01% full scale

Digital I/O:
2 inputs 5 to 24 VDC, 3 outputs 115 VAC/150 mA
N.O. or N.C. (dry contact)

Communication Ports:
RS-232 transmit only, or RS-485 half duplex
Supports up to 115,200 bps

Analog Output:
Opto isolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:
0.3 in (8 mm), six-digit, seven-segment LED
Annunciators: Net, center of zero, stability,
kg, g, lb

Keys/Buttons:
4-key membrane panel, tactile feel
zero, tare, print, menu, escape, left and up
navigation, enter

Dimensions
(W × H × D)
4.72 × 4.52 × 0.98 in
(120 × 115 × 25 mm)

Temperature:
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
85% non-condensing

Rating/Material:
Enclosure: NEMA Type 1 plastic
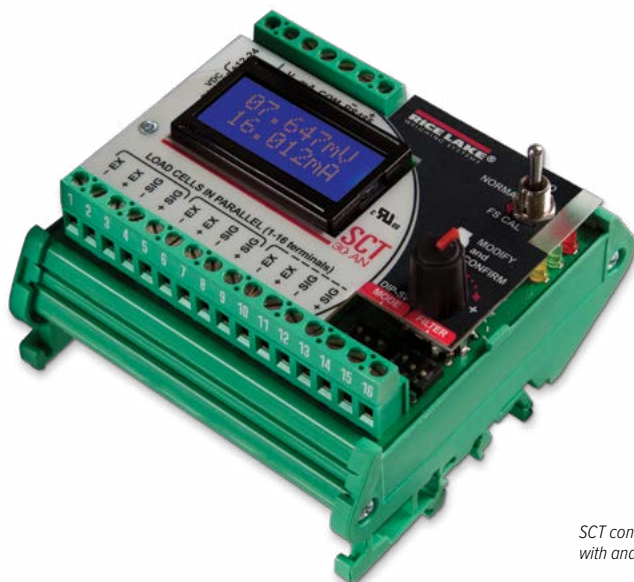pluggable connectors

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
NTEP 14-083
cULus Recognized

Approvals

SCT converter with analog output

Part Number/Price

Part #	Description	Est. Weight	Price
156794	SCT-30 converter with Analog Output	1 lb	$475.00
156834	SCT-30 converter with Analog Output in enclosure	1 lb	$630.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	$160.00
131129	Installation manual	1 lb	$25.00
199707	DIN rail clip right & left end clamp		$11.00

Standard Features

- LCD display
- Powers up to eight (350 ohm) load cells in parallel (with a 24-bit A/D converter)
- A/D converter 24-bit 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
- Diagnostic message for load cell disconnect and over-capacity errors

Specifications

Power:
Input: 12 to 24 VDC

Power Consumption:
3 W

Excitation Voltage:
5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum
1.0 µV/graduation recommended

A/D Sample Rate:
300 Hz

Resolution:
Internal: 16,000,000 counts

System Linearity:
± 0.01% full scale

Communication Ports:
RS-485

Analog Output:
Opto isolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:
Eight-digit alphanumeric tow line LCD, 5 mm high

Keys/Buttons:
Control knob and DIP switches

Dimensions:
(L × W × H)
3.74 × 3.54 × 2.36 in
(95 × 90 × 60 mm)

Temperature:
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
85% non-condensing

Rating/Material:
DIN rail mount: NEMA Type 1

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approval:
cULus Recognized

INDICATORS / CONTROLLERS

SCT-40
Signal Conditioning Transmitter

Approvals

Standard Features

- LCD display
- 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 linear calibration
- Push-button or preset tare
- Converts digital weight to analog output or optional DeviceNet®, PROFIBUS®, EtherNet/IP™, PROFINET and Modbus TCP protocols
- Supports ASCII or Modbus RTU protocols
- Bit swapping selection for little endian and endian format
- Three digital inputs, five digital outputs
- One serial port, RS-485 half duplex or RS-232 transmit-only connection

SCT-40AN only

- Full scale analog output with zero setting and PLC correction of analog signal

Part Number/Price

Part #	Description	Est. Weight	Price
170470	SCT-40 with Analog Output	1 lb	$800.00
170471	SCT-40 with DeviceNet®	1 lb	$1,045.00
170472	SCT-40 with PROFIBUS®	1 lb	$1,045.00
170473	SCT-40 with EtherNet/IP™	1 lb	$1,085.00
170474	SCT-40 with Ethernet TCP/IP	1 lb	$1,045.00
170475	SCT-40 with Modbus TCP	1 lb	$1,085.00
170476	SCT-40 with PROFINET IO	1 lb	$1,050.00

EtherNet/IP and Modbus output changed to Dual Port in 2019

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	$140.00
119244	24 VDC 1.3 A DIN rail mount power supply.	1 lb	$160.00
131128	Installation manual	1 lb	$25.00

Specifications

Power:
Input: 12 to 24 VDC

Power Consumption:
5 W

Excitation Voltage:
5 VDC, 240 mA, 16 x 350 ohm load cells

Analog Signal Input Range:
± 39 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum
1.0 µV/graduation recommended

A/D Sample Rate:
600 Hz

Resolution:
Internal: 16,000,000 counts
Display: 999,999

System linearity:
± 0.01% full scale

Digital I/O:
3 inputs 5 to 24 VDC, 5 outputs, 115 VAC/150 mA

Communication Ports
RS-232 transmit only, or RS-485 half duplex
Supports up to 115,200 bps

Analog Output (SCT-40AN only):
Opto isolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:
Backlit graphic LCD, transmissive
128 × 64 pixel resolution, 60 x 32 mm visible area

Keys/Buttons:
Five-key tactile keypad
Test, zero, tare, print menu, escape, left and up, navigator, enter

Dimensions:
(L × W × H)
5.82 × 3.62 × 2.36 in
(148 × 92 × 60 mm)

Temperature:
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:
85% non-condensing

Rating/Material:
DIN rail mount: NEMA Type 1

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
cULus Recognized

Specifications

Vernier:
Two ranges; one is equal to the sum of the 0.05 mV/V switch and the 0 to 0.5 mV/V switch. The other is the sum of the 0.5 mV/V, 0.1 mV/V and 0.01 mV/V switches.

Load Impedance:
Three settings:
X0.5: 700 ohm
X1: 350 ohm (one standard load cell)
X4: 87.5 ohm (four load cell platform)

Linearity:
± 0.01% + 1μV

Connectors:
Low Thermal Electronics, Type 2758 precision gold plated binding posts, standard banana jacks or 14 AWG wire

Temperature Coefficient:
5 ppm/ °C

Zero Offset:
± 0.0005 mV/V

Output Range:
0 to 3 mV/V in 0.01 mV/V steps

LED Annunciators:
EXC +
EXC −
Offset ON
0.5 mV/V
0.1 mV/V

Warranty:
One-year limited

Standard Features

- High resolution design
- Used in high precision testing, troubleshooting and calibrating digital weight indicators
- Switchable offset
- Painted die-cast enclosure

Part Number/Price

Part #	Description	Price
157323	Ranger 7 high resolution calibration simulator	$1,050.00

Options/Accessories

Part #	Description	Price
21116	Cable (4 ft) with banana plugs	$70.00

INDICATORS / CONTROLLERS