Indicators / Controllers

1280 Enterprise™ Series
Programmable Color Touchscreen Weight Indicator/Controller

Panel Mount

7-inch Touch-only

12-inch Touch-only

Universal

Wall Mount

Standard Features

- Graphical color display that adjusts for ambient light conditions
- Highly customizable graphical user interface
- Three different enclosure types: universal with tilt stand, panel mount and wall mount
- Resistive color touchscreen that can be used with gloves
- On-screen keyboard available during entry mode or use an external keyboard
- Multi-language operation and text entry
- Keypad for scale operations, numeric entry and navigation
- More than 150 built-in functions for programming
- Customize applications and data tables with iRite™ software
- Built-in web server for remote access, systems integration and data monitoring
- Up to eight scales supporting five scale types:
  - Analog load cell scales
  - Total scales
  - Serial scales
  - Program scales
  - iQUBE²® scales
- Multi-range/interval weighing functions
- Eight digital I/O for control and pulse count
- 100 setpoints, 18 configurable setpoint types
- 22 softkeys with 10 user-defined
- Two RS-232 and RS-485 serial ports
- USB, Ethernet TCP/IP, Wi-Fi Direct ® and Bluetooth® ports

Specifications

Power:
AC voltages: 100-240 VAC; 50-60 Hz
DC voltages: 11-30 VDC
Consumption: 60W

Excitation Voltage:
10 ± 0.5 VDC
16 x 350Ω or 32 x 700Ω 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–120 Hz
1.0 µV/graduation recommended

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

Approvals

NTEP

Measurement
Canada
Approved

OIML

CE

c (UL) us
LISTED

c UL us

Resolution:
Internal: 8 million counts/8,000,000
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)
Port 4: Bluetooth® SPP 2.1+EDR
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 x 480 pixel, graphical color TFT
display 500 or 1,000 NIT
Twelve-inch, 1280 x 800 pixel, graphical color TFT
display 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 Range:
Certified: 14°F to 104°F (-10°C to 40°C)
Operating: -4°F to 131°F (-20°C to 55°C)

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)

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

Warranty:
Two-year limited warranty

EMC Immunity:
EN 50082 Part 2 IEC EN 61000-4-2, 3, 4, 5, 6, 8,
and 11

Approvals:
NTEP CC 15-001/Class III/IIIL 10,000d
Measurement Canada AM-5980C,
Class III/III HD 10,000d
OIML R76/2006-NL1-16.04 Class III/IIII 10,000d
EU Test Certificate TC8596
UL/cUL Listed (universal, wall mount)
UL/cUL Recognized (panel mount)
CE Marked

RICE LAKE

1280 Enterprise™ Series
Programmable Color Touchscreen Weight Indicator/Controller

7-inch model with keypad

7-inch touch-only model

12-inch touch-only model

Numeric Keypad Models:
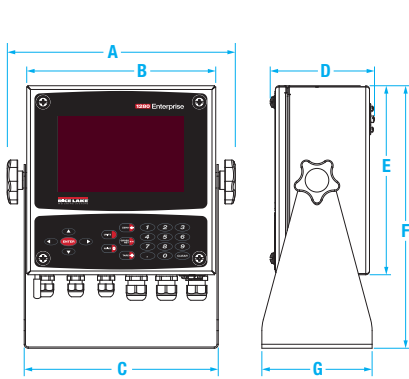
1280-2
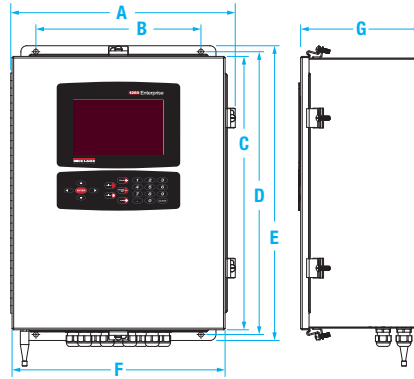
1280-3
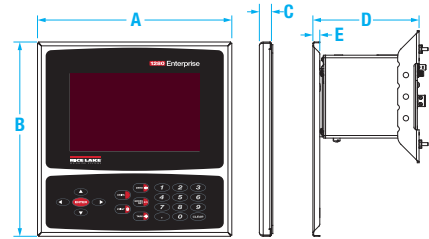
1280-4

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

Wall Mount (1280-3) Dimensions
A	14.92 in (379 mm)	B	11 in (279 mm)
C	18.22 in (463 mm)	D	18.84 in (479 mm)
E	19.64 in (499 mm)	F	14.20 in (361 mm)
G	8.08 in (205 mm)		

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

Touch-only Models:
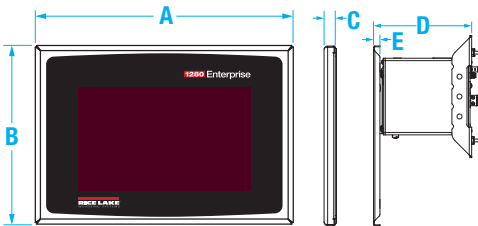
1280-5
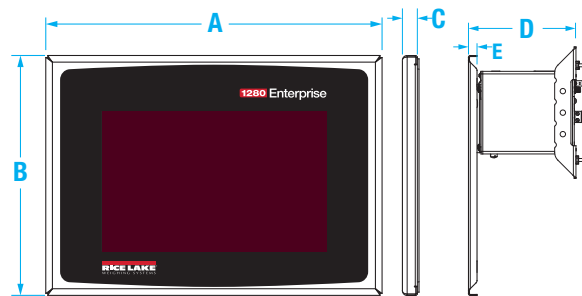
1280-6

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

12-inch Touch-only (1280-6) Dimensions
A	14.00 in (356 mm)	B	10 in (254 mm)
C	0.58 in (15 mm)	D	5.34 in (136 mm)
E	0.32 in (8 mm)		

www.ricelake.com | Phone: 800-472-6703

RICE LAKE®

45

1280 Enterprise™ Series
Programmable Color Touchscreen Weight Indicator/Controller

Generate a 1280 Enterprise Series Model Reference Code
This reference number can be used at time of ordering.

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 |

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
A	AU/NZ Plug Wall

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

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 Input
J	EtherNet/IP
K	DeviceNet
L	ProfiNet
M	Modbus TCP
N	Profibus DP
O	EtherCat
P	PowerLink

Part Number

Part #	Reference #	Description	Power	Display	Option Installed	Price
Universal Enclosure with 500 NIT Display (1280-2)						
171427 †	1111BAAAAA	1280 Universal	115 VAC	500 NIT	Single Scale Card	$3,450.00
171441 ††	1131BAAAAA	1280 Universal	100-240 VAC	500 NIT	Single Scale Card	$3,450.00
171662 †	1111CAAAAA	1280 Universal	115 VAC	500 NIT	Dual Scale Card	$3,625.00
172188 ††	1131CAAAAA	1280 Universal	100-240 VAC	500 NIT	Dual Scale Card	$3,625.00
Panel Mount Enclosure with 500 NIT Display (1280-4)						
171663	21-3BAAAAA	1280 Panel Mount	100-240 VAC	500 NIT	Single Scale Card	$3,250.00
172186	21-3CAAAAA	1280 Panel Mount	100-240 VAC	500 NIT	Dual Scale Card	$3,425.00
Wall Mount Enclosure with 500 NIT Display (1280-3)						
173673 †	3143BAAAAA	1280 Wall Mount	115 VAC	500 NIT	Single Scale Card	$3,850.00
174143 ††	3153BAAAAA	1280 Wall Mount	100-240 VAC	500 NIT	Single Scale Card	$3,850.00
174144 †	3143CAAAAA	1280 Wall Mount	115 VAC	500 NIT	Dual Scale Card	$3,625.00
174145 ††	3153CAAAAA	1280 Wall Mount	100-240 VAC	500 NIT	Dual Scale Card	$4,025.00
Wall Mount Enclosure with 1000 NIT Display (1280-3)						
172184 †	3144BAAAAA	1280 Wall Mount	115 VAC	1,000 NIT	Single Scale Card	$3,950.00
172185 ††	3154BAAAAA	1280 Wall Mount	100-240 VAC	1,000 NIT	Single Scale Card	$3,950.00
173806 †	3144CAAAAA	1280 Wall Mount	115 VAC	1,000 NIT	Dual Scale Card	$3,080.00
172187 ††	3154CAAAAA	1280 Wall Mount	100-240 VAC	1,000 NIT	Dual Scale Card	$4,125.00
Touch-only 7 inch with 500 NIT Display (1280-5)						
186618	41-3BAAAAA	1280 Touch-only 7 in	100-240 VAC	500 NIT	Single Scale Card	$3,250.00
Touch-only 12 inch with 1500 NIT Display (1280-6)						
186465	51-5BAAAAA	1280 Touch-only 12 in	100-240 VAC	1,500 NIT	Single Scale Card	$3,975.00

† US plug (NA) - Type B
†† Euro Plug - Type E
(Brazil) - Type N
††† BS1363 (UK) - Type G
†††† AS 3112 (Australian) - Type I

Single A/D Scale

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

Part #	Description	Price
164085	Single scale A/D	$375.00
166957	A/D sealing kit	$13.00

Dual A/D Scale

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

Part #	Description	Price
164683	Dual scale A/D	$550.00
166957	A/D sealing kit	$13.00

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	$325.00
170008	DIO adapter, includes 60 pin flat ribbon cable, 24 in	$130.00
170009	DIO adapter, includes 60 pin round cable, 60 in	$155.00
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, 1200-115200 baud

Part #	Description	Price
164685	Dual serial channel	$375.00

Single Analog Out

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

Part #	Description	Price
165366	Single analog out	$375.00

Dual Analog Out

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

Part #	Description	Price
164686	Dual analog out	$550.00

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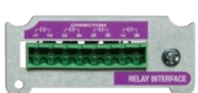
Relay four-dry contact, max current
3A @ 30 VDC, 3A @250VAC

Part #	Description	Price
164689	Relay card	$425.00

Analog Input

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

Part #	Description	Price
164687	Dual analog input	$650.00

Data Exchange with PLC/DCS Systems

EtherNet/IP

Part #	Description	Price
165792	EtherNet/IP	$600.00

DeviceNet

Part #	Description	Price
165793	DeviceNet	$600.00

Profinet

Part #	Description	Price
165794	Profinet	$600.00

Modbus TCP

Part #	Description	Price
165796	Modbus TCP	$600.00

Profibus DP

Part #	Description	Price
165795	Profibus DP	$600.00

EtherCAT

Part #	Description	Price
179533	EtherCAT	$600.00

PowerLink

Part #	Description	Price
182319	PowerLink	$850.00

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Grayhill Relays and Racks

Part #	Description	Price
52332	Two-channel input relay, 2.5-28VDC	$65.00
52318	Two-channel input relay, 120VAC	$59.00
52319	Two-channel input relay, 240VAC	$61.00
52331	Two-channel input relay, 10-32VDC	$70.00
52316	Two-channel output relay, 120-140VAC at 2 amp	$72.00
52317	Two-channel output relay, 240-280VAC at 7 amp	$79.00
71376	Two-channel output relay, 3-60VDC at 1 amp	$78.00
71377	Two-channel output relay, 0-200VDC/VAC at 1.5A/10W (dry contact)	$105.00
84698	Two-channel output relay, inductive load, 120-140VAC at 2A	$85.00
84699	Two-channel output relay, inductive load, 240-280VAC at 2A	$100.00
52312	Eight-channel relay rack, panel mount and wall mount, requires 50-pin flat or round ribbon cable - 4 slots	$300.00
52314	16-channel relay rack, panel mount and wall mount, requires 50-pin flat or round ribbon cable - 8 slots	$415.00
52315	24-channel relay rack, panel mount and wall mount, requires 50-pin flat or round ribbon cable - 12 slots	$615.00
170008	Cable, 60-pin flat ribbon with 50-pin adapter, 24 in length	$130.00
170009	Cable, 60-pin round with 50-pin adapter, 60 in length	$155.00
170736	Cable, 60-pin round with cord grip and 50-pin adapter, 60 in length	$155.00

Options

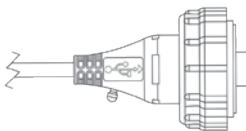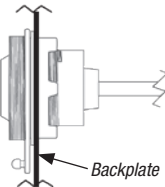| Part #	Description	Price
Manuals and Software		
77925	Revolution scale software	$35.00
166046	Manual, Operation	$25.00
167659	Manual, Technical	$35.00
167660	CD, 1280 Documents	$25.00
164939	8 GB Micro SD card with SD and USB adapter	$25.00
173046	USB flash drive, 1 GB	$10.00
Extended Cable Length 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
180744	Touch cable for touch-only, 5 ft length	$105.00
180745	Touch cable for touch-only, 10 ft length	$105.00

Unsealed Connectors

Type B

Type A

Sealed Connector

Sealed Receptacle

← *Backplate*

Options

Part #	Description	Price
Primary Component Parts		
163400	7 in 500 NIT display	$350.00
163399	7 in 1,000 NIT display	$450.00
182992	12 in 1,500 NIT display	$875.00
179992	CPU board assembly includes face plate and fan plate	$1,100.00
160758	Back plane board	$210.00
162693	AC power supply board	$170.00
162694	DC power supply board	$180.00
164121	Overlay, keypad, for panel & wall mount	$75.00
164120	Overlay, touchscreen, for panel & wall mount	$130.00
161731	Overlay, keypad, for universal	$75.00
161730	Overlay, touchscreen, for universal	$130.00
178498	Overlay, touchscreen, for 7 in touch-only panel mount	$210.00
176126	Overlay, touchscreen, for 12 in touch-only panel mount	$400.00
178161	Clear protective overlay display (pack of 5)	$63.00
178163	Clear protective overlay keypad (pack of 5)	$63.00

Options/Accessories

Part #	Description	Sealed A	Sealed B	Unsealed A	Unsealed B	Price
USB Cables (Note: Cables have a plug)						
152434	Unsealed connectors USB-A to USB micro A, 2 m cable			X		$15.00
79074	Unsealed connectors USB-A to USB-B, 2 m cable			X	X	$35.00
124700	Sealed connectors, USB-A to USB-B, 3 m IP68 cable	X	X			$90.00
126477	Sealed connector USB-A to unsealed connector USB-A, 3 m IP68 cable	X		X		$90.00
124701	Sealed connector USB-A to unsealed connector USB-B, 3 m IP68 cable	X			X	$90.00
124702	Sealed connector USB-B to unsealed connector USB-A, 3 m IP68 cable		X	X		$90.00
USB Receptacles (Note: Receptacles have a socket)						
176790	Sealed receptacle USB-A for panel mount, 0.75 m cable	X		X		$105.00
126476	Sealed receptacle USB-A for wall mount, 0.5 m cable	X		X		$90.00
172735	Sealed receptacle USB-A for universal, 0.25 m cable	X		X		$90.00
124694	Cover for sealed receptacles					$13.00
124689	Cover for flash driver mounts on sealed receptacle					$25.00
Ethernet Cables		**Sealed**		**Unsealed**		
72697	Unsealed Ethernet, R-J45 to RJ-45, 2 m cable			X		$40.00
124706	Sealed to sealed Ethernet 3 m cable	X				$90.00
124707	Sealed to unsealed Ethernet 3 m cable	X		X		$90.00
Ethernet Receptacles		**Sealed**		**Unsealed**		
176789	Sealed receptacle Ethernet RJ-45, 0.75 m cable	X				$105.00
172734	Sealed receptacle Ethernet RJ-45, 0.5 m cable	X				$90.00
126353	Sealed receptacle Ethernet RJ-45, 0.25 m cable	X				$90.00

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

Specifications

Enclosure:
NEMA Type 4, IP65

Weight:
0.98 lb (445 g)

Keypad:
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

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

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

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

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)

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

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

RF Effective Range:
Typically 100 ft – 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

Standard Features

- Handheld RF remote display with six-digit 1.0 in (26.4 mm) LCD screen
- 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)
- Communicates with RF MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7300 Dyna-Link 2, MSI-7000 and MSI-7001 TranSend™

Part Number/Price

Part #	Description	Est. Weight	Price
139381	MSI-8000 RF remote display (requires ScaleCore™ equipped MSI-7300, MSI-4260, MSI-3460 and TranSend receivers)	5 lb	$1,250.00
213559	MSI-8000 RF remote display with WiFi (requires ScaleCore™ equipped MSI-7300, MSI-4260, MSI-3460 and TranSend receivers)	5 lb	$1,390.00

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	$145.00
149550	Universal 115/230 VAC 50/60 Hz (EC plug standard) battery charger for MSI 8000 RF remote display	1 lb	$140.00
150964	DB9 female serial interface cable for MSI-8000 RF eremote display	1 lb	$180.00
151095	Audible alarm	-	$285.00
182223	12V car charger adapter for MSI-8000	1 lb	$125.00

Dimensions			
A	8.00 in (203 mm)	C	3.85 in (98 mm)
B	3.85 in (98 mm)	D	1.37 in (35 mm)
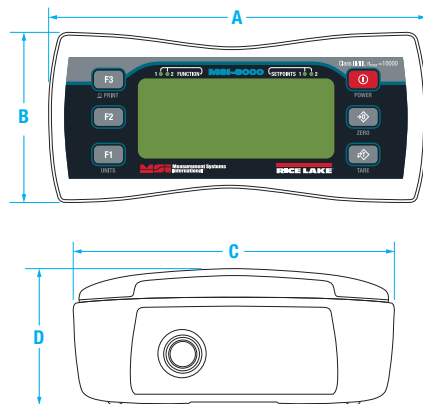
MSI-8000HD
Indicator/Remote Display

Shown with tilt stand.

Standard Features

- Indicator or RF remote display with six-digit 1.0 in (26.4 mm) LCD screen
- IP68 milled aluminum enclosure
- Membrane keypad for remote-control functionality
- User-definable function keys for added versatility
- 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™
- Swivel tilt stand
- NTEP certified configuration

Approvals

Options

- Up to 8 configurable relay outputs
- Wi-Fi communications
- Bluetooth® communications
- 802.15.4 Serial RF
- FHSS
- Wired Ethernet

Dimensions

A	12.82 in (326 mm)	B	11.05 in (281 mm)

Specifications

Enclosure:
NEMA Type 4, IP68 milled anodized aluminum with O-ring gaskets

Keypad:
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

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

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

Annunciators:
Stable, COZ, peak, kg, kN. lb, M, ton, setpoint, function LEDs
Channels: 1, 2, 3, 4, TTL

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

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

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

Excitation:
4.8 V current limited and over-voltage protected

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 ft – 300 ft, line of sight, for longer range consult factory

Data I/O:
Dual RS-232 comm ports

Optional Communications:
Wi-Fi
Bluetooth®
Serial RF (Single Sequence or FHSS)

Warranty:
One-year limited

Approvals:
NTEP CC#15-110 (-10°C to 40°C)

Part Number/Price

Part #	Description	Est. Weight	Price
153591	MSI 8000HD ScaleCore RF/Remote Display/85-265 VAC	5 lb	$1,370.00
154853	MSI 8000HD ScaleCore RF/Remote Display/Internal Battery	5 lb	$1,480.00
160476	MSI 8000HD ScaleCore RF/Remote Display/7-36 VDC	5 lb	$1,320.00
159377	MSI 8000HD ScaleCore RF/Remote Display/18-72 VDC	5 lb	$1,350.00
159376	MSI 8000HD ScaleCore RF/Remote Display/9-36 VDC	5 lb	$1,350.00
158427	MSI 8000HD Meter/2 A/D Inputs/85-265 VAC (non RF)	5 lb	$1,660.00
158428	MSI 8000HD Meter/2 A/D Inputs/Internal Battery (non RF)	5 lb	$1,770.00
160478	MSI 8000HD Meter/2 A/D Inputs/7-36 VDC (non RF)	5 lb	$1,480.00
159381	MSI 8000HD Meter/2 A/D Inputs/18-72 VDC (non RF)	5 lb	$1,520.00
159380	MSI 8000HD Meter/2 A/D Inputs/9-36 VDC (non RF)	5 lb	$1,520.00
158425	MSI-8000HD RF Meter/2 A/D Inputs/85-265 VAC	5 lb	$1,680.00
158426	MSI-8000HD RF Meter/2 A/D Inputs/Internal Battery	5 lb	$1,830.00
160477	MSI 8000HD RF Meter/2 A/D Inputs/7-36 VDC	5 lb	$1,680.00
159379	MSI 8000HD RF Meter/2 A/D Inputs/18-72 VDC	5 lb	$1,690.00
159378	MSI 8000HD RF Meter/2 A/D Inputs/9-36 VDC	5 lb	$1,690.00
176957 *	MSI 8000HD BT Meter/85-265 VAC	5 lb	Consult
176958	MSI 8000HD Wi-Fi Meter/85/265 VAC	5 lb	$1,400.00
176959 *	MSI 8000HD BT Meter/Internal Battery	5 lb	Consult
176960	MSI 8000HD Wi-Fi Meter/Internal Battery	5 lb	$1,520.00
176962 *	MSI 8000HD BT Meter/7-36 VDC	5 lb	Consult
176964	MSI 8000HD Wi-Fi Meter/7-36 VDC	5 lb	$1,350.00
176965 *	MSI 8000HD BT Meter/9-36 VDC	5 lb	Consult
176966	MSI 8000HD Wi-Fi Meter/9-36 VDC	5 lb	$1,390.00
176967 *	MSI 8000HD BT Meter/18-72 VDC	5 lb	Consult
176968	MSI 8000HD Wi-Fi Meter/18-72 VDC	5 lb	$1,390.00

* Bluetooth modems only work with certain Android devices. Please contact MSI for potential applications.

Options/Accessories

Part #	Description	Price
155173	MSI-8000HD spare tilt stand option kit	$79.00
155193	MSI-8000HD Ethernet TCP/IP option kit wired	$390.00
162178	Antenna extension kit, 5 ft	$440.00
148624	MSI-8000HD serial RS-232 cable	$125.00
158779	MSI-8000HD two each coil relay option kit, 250 VAC/30 VDC 5A or 100 VDC 0.4A	$335.00
158780	MSI-8000HD two each solid state relay option kit, 60 V pk 2.7A	$335.00
158781	MSI-8000HD two each solid state relay option kit, 200 V pk 0.9A	$335.00
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000HD battery powered device	$145.00
149550	Universal 115/230 VAC 50/60 Hz (international plugs) battery charger for MSI-8000HD battery powered device	$140.00
171203	Audible alarm kit	$335.00
176963	Serial print cable (for Godex printer)	$145.00
Relays		
172490	Expanded Relay Kit, Four-Channel, 12A 5V, Latching Relays	Consult
172492	Expanded Relay Kit, Four-Channel, 12A 5V, Momentary Relays	Consult
Consult	Expanded Relay Kit, Four-Channel, 0.9A 200V pk, AC/DC Solid State Relays	Consult
172495	Expanded Relay Kit, Eight-Channel, 12A 5V, Momentary Relays	Consult
172500	Expanded Relays Option Kit, Four-Channel, 3A 60V pk Solid State Form C Relays	Consult
172501	Expanded Relays Option Kit, Eight-Channel, 3A 60V pk, Solid State Form C Relays	Consult
172502	Expanded Relays Option Kit, Eight-Channel, 0.9A 200V pk, Solid State Form C Relays	Consult
171676	Expanded Relays Option Kit, Eight-Channel, 12A 5V, Latching Relays	Consult

INDICATORS / CONTROLLERS

Phone: 800-472-6703   www.ricelake.com

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MSI-8004HD
Indicator/RF LED Remote Display

Standard Features

- IP65 rugged milled aluminum enclosure
- Backlit membrane keypad for user functioning and controls
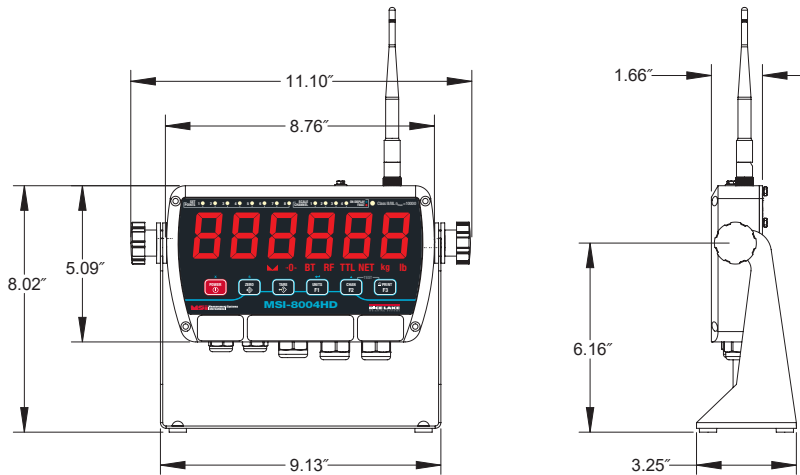- Tilt bracket included
- NTEP certified configuration

Options

- Expanded relay outputs
- Battery pack for mobile operation
- Second radio module for additional network connectivity

Approvals

Measurement
Canada
Approved

Specifications

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

Enclosure:
NEMA Type 4, IP65 milled anodized aluminum

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

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

Units:
Pounds and kilograms only

Annunciators:
Stable, COZ, peak, kg, kN. lb, M, ton, setpoint, function LEDs

Channels:
1, 2, 3, 4, TTL

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

Operating Temperature:
-4°F to 140°F (-20°C to 60°C)
Legal for Trade: 23°F to 104°F (-5°C to 40°C)

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:
Four independent or summing load cell inputs

Excitation:
4.8 V current limited and over-voltage protected

Relays:
Two 5V coil, 250VAC, 5A 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, cellular connectivity or Bluetooth®

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

Data I/O:
Two RS-232 hard wired communication ports

Warranty:
One-year limited

Approvals:
NTEP CC #17-036 (-5°C to 40°C)
Measurement Canada

MSI-8004HD
Indicator/RF LED Remote Display

INDICATORS / CONTROLLERS

Part Number/Price

Part #	Description	Price
Indicator		
196904	MSI-8004HD Indicator, 4CH AC, Red/Green Instant Power-On, 85~264 VAC, 47~440 Hz, 120~370 VDC	$2,130.00
178265	MSI-8004HD Indicator, 4CH AC, Red/Green 85~264 VAC, 47~440 Hz, 120~370 VDC	$1,930.00
178269	MSI-8004HD Indicator, 4CH DC 8-32V, Red/Green Best for external 12V SLA Batteries	$1,960.00
178271	MSI-8004HD Indicator, 4CH DC 9-36V Iso, Red/Green Do not use on 12V Vehicle Systems	$2,050.00
183481	MSI-8004HD Indicator, 4CH 5V Red/Green with external rechargeable battery	$1,940.00
Remote Display		
178281	MSI-8004HD Display, AC, Red/Green 85~264 VAC, 47~440 Hz, 120~370 VDC	$1,880.00
178283	MSI-8004HD Display, DC, 8-32V, Red/Green Best for external 12 V SLA Batteries	$1,840.00
178285	MSI-8004HD Display, DC, 9-36V Iso, Red/Green Do not use on 12 V Vehicle Systems	$1,920.00
183479	MSI-8004HD Display, 4CH 5V Red/Green with external rechargeable battery	$1,660.00

Options

Part #	Description	Price
148624	Serial Cable, RS-232 9000 Serial Cable, DCE	$125.00
139309	Antenna Kit, Long Range Omni-directional, 9 dBi with 3 m Coax. Intended for omni-directional mast mounting (up to 2" Ø). Beam-width. Must be mounted vertically.	$460.00
139310	Antenna Kit, Corner Reflector, 9 dBi with 3 m coax intended for directional wall or mast mounting (up to 2" Ø). Beam-width: 75° Elevation, 65° Azimuth	$455.00
139311	Antenna Kit, Corner Reflector, 12 dBi with 3 m coax intended for directional wall or mast mounting (up to 2" Ø). Beam-width: 50° Elevation, 36° Azimuth	$485.00
139312	Antenna Kit, YAGI, 15 dBi with 3 m coax highly directional wall or mast mounting (up to 2" Ø). Beam-width: 30° Elevation, 34° Azimuth	$375.00
139313	Antenna Kit, Vehicle Mount, 5 dBi with 5 m coax omni-directional. Mounts in 3/4" Hole.	$140.00
162178	Antenna extension kit, 5 ft	$440.00
197013	Antenna extension kit, 20 ft	$470.00
155173	Option kit, tilt stand	$79.00
171203	Audible alarm Not compatible with battery versions	$335.00
22436	Cable, Comm DB9F 9 Pin Fem One end stripped and tinned on other end 6' Pin 2 (Brown) Pin 3 (Red) Pin 5 (Yellow) For use with MSI-8004HD serial ports to connect to: Scoreboard displays, printers, computers & other equipment that supports RS-232	$67.00
183437	Battery, 5V Li-ion battery with USB power ports. Output 5V/3.0A per port (6.0 A max)Rate, 2A per port (4A if both ports are used)	$210.00
184132 *	8004 option kit, Bluetooth® with SMA antenna	Consult
184131	8004 option kit, WiFi with SMA antenna	$180.00
187424	8004 option kit, 2nd Xbee with TNC antenna	$190.00
182224	Power Adapter, 12 VDC 5 VDC Dual USB Car Charger plus 3 ft USB Cable	$53.00
Relays		
172500	Expanded Relays Option Kit, four-channel, 3A, 60V pk SSR form C	Consult
172501	Expanded Relays Option Kit, eight-channel, 3A 60V pk, SSR form C	Consult
Consult	Expanded Relays Option Kit, four-channel, 0.9A 200V pk, AC/DC SSR Form C	Consult
172502	Expanded Relays Option Kit, eight-channel, 0.9A 200V pk, SSR form C	Consult
172492	Expanded Relays Option Kit, four-channel, 12A 5V, momentary	Consult
172495	Expanded Relays Option Kit, eight-channel, 12A 5V, momentary	Consult
172490	Expanded Relays Option Kit, four-channel, 12A 5V, latching relays	Consult
171676	Expanded Relays Option Kit, eight-channel, 12A 5V, latching relays	Consult

ScaleConnect app only works with certain Android devices. Please contact MSI for potential applications.

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MSI-9750A CellScale™ RF Portable Indicator

Standard Features

- Compatible with MSI-6260CS, MSI-9300 and MSI-9000 CellScale
- 1.4 in x 2.6 in (36 mm x 67 mm), eight line, 21 character LCD display
- 2.4 GHz spread spectrum transceiver
- Power supply: six cell NiMH battery pack
- Charger board: SMD NiMH fast charge (charges battery pack in two hours or less)
- RS-232 data I/O
- Real-time clock
- NEMA Type 3, IP55 enclosure
- AC adapter/battery charger; 90-264 VAC, 47-63 Hz (NA plug standard)

Approvals

NTEP

Part Number/Price

Part #	MSI Part #	Description	Est. Weight	Price
138486	502541-0001	MSI-9750 RF portable indicator	2.2 lb	$2,080.00

Options/Accessories

Part #	MSI Part #	Description	Est. Weight	Price
Accessories				
143709	12431	Replacement NiMH battery pack	1 lb	$140.00
139484	503441-0001	AC adaptor/battery charger input, 90–264 VAC, 47–63 Hz (NA plug standard)	1 lb	$120.00
143912	12674	Battery charger, 12 VDC auto plug	1 lb	Consult
139485	503441-0002	AC adaptor/battery charger, EU plug	1 lb	Consult

Specifications

Enclosure:
NEMA Type 3, IP54 ,Rugged Molded PVC, O-ring gasketed.

Dimensions:
4.6in x 10.3in x 2.4 in (117 x 262 x 60.5 mm)

Weight:
2.2 lb (1 kg)

Keypad:
24 keys–11 key alphanumeric, 7 control keys and 6 user programmable keys.
Password protected with lock feature

Display:
1.4in x 2.6in (36 x 67 mm) backlight LCD capable of 8 lines, 21 characters each. Backlight selectable On, Off or Automatic. Red/Green LED battery charging indicator

Power:
Rechargeable 6 cell NiMH battery pack
(AC Adapter/Battery Charger Input Included)

Operating Time:
Up to 8 hours typical use. Selectable automatic shut off for battery conservation

Operating Temperature:
-4°F to 158°F (-20°C to 70°C)
Legal for Trade: 14°F to 104°F (-10°C to 40°C)

Radio Link:
FHSS at 2.4 GHz (Up to 64 network selections)

Radio Effective Range:
Typically 500 ft (150 m) indoors, 1000 ft (300 m) outdoors with standard antennas

RFI/EMI Shielding:
Exceeds NIST HB44 and CE Standards

Connectors:
Charger Input: Standard 2.5 mm coaxial; RS-232: Standard DB-9 male

Warranty:
One-year limited

Approvals:
NTEP CC 05-077

MSI-9850 CellScale™ RF Digital Indicator

Specifications

Enclosure:
NEMA Type 4, IP65 milled anodized aluminum with O-ring gaskets
NEMA Type 6, IP67 with optional long-range antenna

Weight:
5.0 lb (2.8 kg)

Keypad:
33 keys–12 key alphanumeric, four cursor keys, seven control keys and 10 user programmable keys. Password protected with lock feature

Weight Display:
Six-digit, 1.2 in (30 mm) high numeric weight LED, four alphanumeric 0.5 in (13 mm) high data LED, six LED function select annunciators, 10 LED annunciators, Low battery LED indicator

Information Display:
1.4 in x 2.6 in (36 x 67 mm) backlit LCD. Capable of 8 lines of 21 characters each backlight selectable On, Off or Automatic

Power Input:
Internal AC/DC power supply: 85-265 VAC, 47-440 Hz/130-300 VDC
Also included: An independent 7-25 VDC power input (requires optional power/switch interface cable) 8 ft/2.4 m power cable included (NA plug standard)

Operating Temperature:
4°F to 158°F (-20°C to 70°C)
Legal for Trade: 14°F to 104°F (-10°C to 40°C)

Radio Link:
FHSS at 2.4 GHz (up to 64 network selections)

Radio Link Effective Range:
Typically 500 ft (150 m) indoor, 1000 ft (300 m) outdoor with standard antennas.
See optional antennas for longer range.

Standard Antenna:
1/2 wave 2 dBi, articulated

RFI/EMI Shielding:
Exceeds NIST HB44 and CE Standards

Connectors:
RS-232, Turck compatible Pico connector

Warranty:
One-year limited

Approvals:
NTEP CC 05-077

Standard Features

- Compatible with MSI-6260CS, MSI-9300 and MSI-9000 CellScale
- Six-digit 1.2 in (30 mm) LED display
- 1.4 in x 2.6 in (36 mm x 67 mm) information LCD display
- 2.4 GHz spread spectrum transceiver
- RS-232 data I/O with real-time clock
- NEMA Type 4, IP65 enclosure
- Power input 85-265 VAC, 47-440 Hz / 130-300 VDC; 8 ft/2.4 m power cable included (NA plug standard)

Approvals

Options
(Contact MSI for application consultation)

- NTEP Certified
- Long range antenna, omni-directional with 9dBi
- Wi-Fi Ethernet connectivity (802.11b)
- Hard wired Ethernet output connection
- Single and dual 4-20 mA output, provides programmable current output
- Bar code scanner
- Setpoint relays, provides up to eight setpoint relay outputs for direct interfacing to external devices
- External audible alarm (activates with setpoint control)
- Universal mounting bracket for either desktop or wall/bulkhead mount
- Optional isolated and non-isolated DC power supplies

MSI-9850 CellScale™ RF Digital Indicator

Part Number/Price

Part #	MSI Part #	Description	Est. Weight	Price
159625	N/A	MSI-9850 RF remote indicator AC/DC	10 lb	$2,775.00
162035	N/A	MSI-9850 RF remote indicator AC/DC International Power	10 lb	$2,640.00

Options/Accessories

Part #	MSI Part #	Description	Price
141558	10082	External setpoint relay output cable, 6.5 ft/2 m	$120.00
138358	502513-0001	RS-232, 13 ft/4 m cable with DB-9 connector	$120.00
176074		Print cable, RS-232, serial output, with DB-9 connector, null modem	$145.00
138625	502598-0001	RF remote controller (control for On/Off, Zero, Tare and other functions. 10 m operating range)	$345.00
143466	12147	Long-range antenna, omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable	$470.00
197013		Antenna extension kit, 20 ft	$470.00
Consult	Consult	9 dBi or 14 dBi gain corner reflector antenna	Consult
Consult	Consult	5 dBi gain vehicle/cab mount whip antenna, includes 17 ft/5.2 m coaxial cable	Consult
139032	502835-0001	Hard-wired Ethernet output connection, includes connector	$395.00
139033	502835-0002	Wi-Fi Ethernet connectivity (802.11b - requires dual antenna enclosure, contact factory for assistance)	$395.00
138615	Consult	Single 4-20 mA output. Provides programmable current output	$565.00
138616	Consult	Dual 4-20 mA output	Consult
Consult	Consult	Bar code scanner (several options available)	Consult
Consult	Consult	Internal setpoint relays, provides up to eight setpoint relay outputs for direct interfacing to external devices	Consult
Consult	Consult	Control kit, provides remote I/O relay board for interfacing to setpoints (note: I/O modules not included)	Consult
138628	502599-0001	External audible alarm (activates with setpoint control)	$420.00
138341	502488-0001	Universal mounting bracket for either desktop or wall / bulkhead mount (specify type)	$150.00
138351	502499-0001	Vehicle or wall mount bracket stand	$150.00
138631	502600-0003	Non-isolated 7-25 VDC power input, includes 13 ft/4 m non-terminated DC input cable	$150.00
138632	502600-0004	Isolated 10-36 VDC power input, includes 13 ft/4 m non-terminated DC input cable	$150.00
138633	502600-0005	Isolated 20-72 VDC power input, includes 13 ft/4 m non-terminated DC input cable	$235.00

Specifications

Enclosure:
NEMA Type 4, IP66

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

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

Radio Link:
Direct sequence spread spectrum at 2.4 GHz

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

Standard Antenna:
1/2 wave 2 dBi, articulated

Warranty:
One-year limited

Echo Data Output:
RS-232

Standard Features

- Tilt mounting bracket
- Integrated data repeater
- AC/DC power supply: 85-265 VAC, 47-440 Hz/130-300 VDC
- RF telemetry via 2.4 GHz modem (certain part numbers only)
- Six high-intensity red digits (double-row discrete LED)
- 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 daylight/night intensity
- Non-glare contrast filtered lens
- Mirror (reverse image) feature
- RS-232, 20 mA and RS-485 communications
- Scale Core RF (certain models only)
- 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

Part Number/Price

| Part #	Description	Price
178004	LaserLight2, 4 in with ScaleCore RF and tilt bracket	$2,250.00
178006	LaserLight2, 6 in with ScaleCore RF and tilt bracket	$2,675.00
178341	Laserlight2, 4 in with tilt bracket	$2,140.00
178342	Laserlight2, 6 in with tilt bracket	$2,550.00

Options/Accessories

Part #	Description	Est. Weight	Price
139309	Long range antenna, 300 m-500 m omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable	1 lb	$460.00
139310	9 dBi gain corner reflector antenna	1 lb	$455.00
139311	12 dBi gain corner reflector antenna	1 lb	$485.00
139313	5 dBi gain vehicle/cab mount whip antenna	1 lb	$140.00
162178	Antenna extension kit, 5 ft	-	$440.00
197013	Antenna extension kit, 20 ft	-	$470.00
178318	Replacement tilt bracket	-	$245.00

MSI Scoreboards Wireless RF

Featuring LaserLight2 Remote Displays

Dimensions

Dimensions			
22-inch enclosure (4-inch model)			
A	22.28 in (565 mm)	C	3.28 in (85 mm)
B	10.96 in (280 mm)	D	9.80 in (250 mm)
31-inch enclosure (6-inch model)			
A	30.63 in (780 mm)	C	3.73 in (95 mm)
B	13.94 in (355 mm)	D	12.77 in (325 mm)
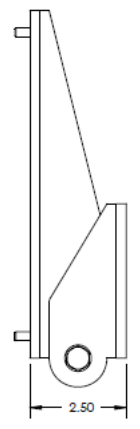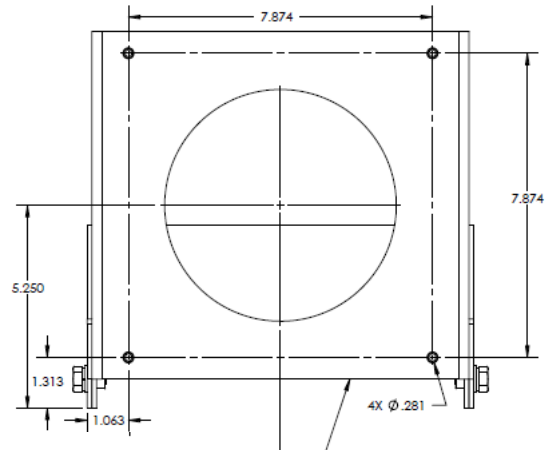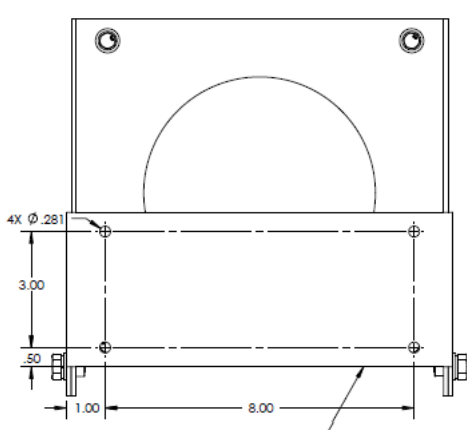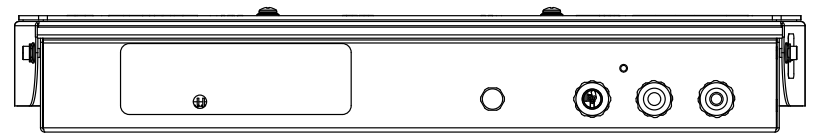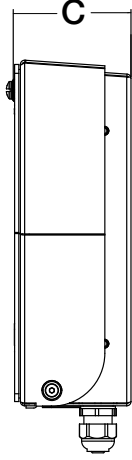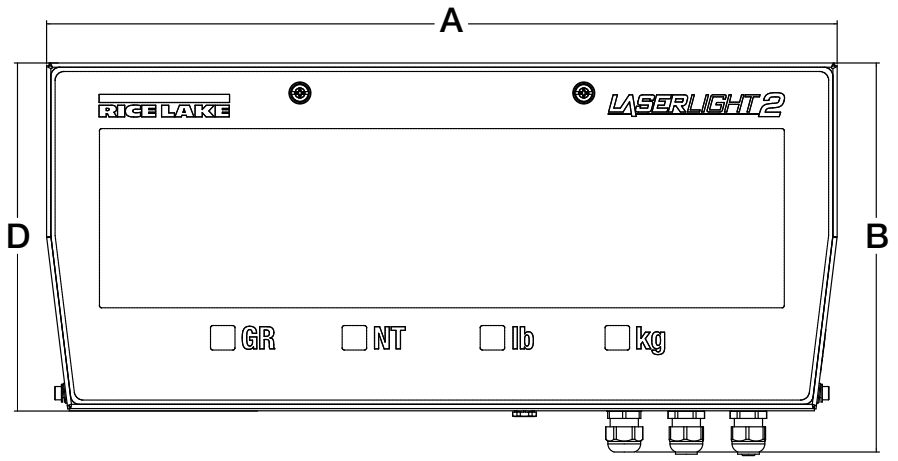
THIS BRACKET ATTACHES
TO THE WALL
(BOLTS NOT INCLUDED)

THIS BRACKET ATTACHES
TO THE LASERLIGHT DISPLAY

4X Ø .281
3.00
.50
1.00
8.00

7.874
7.874
5.250
1.313
1.063
4X Ø .281

2.50

TranSend™ MSI-7000
Wireless Load Cell Interface System

Specifications

Power:
5-6 VDC, 7-36 VDC 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16x 350Ω or 32x 700Ω load cells

Standard Antenna:
1/2 wave 2dBi, articulated

Frequency:
Direct sequence spread spectrum at 2.4 GHz, 802.15.4

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

Digital I/O:
Three coil relays available on select models

Circuit Protection:
RFI, EMI, ESD protection

Serial Port:
Full duplex RS-232

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

Enclosure:
NEMA Type 4 (IP66), aluminum black powder coated (excludes wall cube model)

Additional RF Options:
Wi-Fi
Bluetooth®
Cellular (consult)
802.15.4 FHSS

Warranty:
One-year limited

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
- Auto-off mode - selectable for 15, 30, 45, 60 minutes or off
- Auto-sleep mode - power down during non-use, power up with weight change or key press
- Serial communication cable included with all transmitters

Additional HD Features

- IP68 milled aluminum enclosure
- Second radio modem available

INDICATORS / CONTROLLERS

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TranSend™ MSI-7000
Wireless Load Cell Interface System

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC Power Input			
159207	MSI-7000 four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$935.00
161949	MSI-7000 four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,070.00
176638 *	MSI-7000 four-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176641 *	MSI-7000 four-channel transmitter, includes three coil relays, Bluetooth®	2 lb	Consult
176648	MSI-7000 four-channel transmitter, no relays, Wi-Fi	2 lb	$985.00
176652	MSI-7000 four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,120.00
7-36 VDC Power Input			
159470	MSI-7000 four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$965.00
161951	MSI-7000 four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,120.00
176639 *	MSI-7000 four-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176642 *	MSI-7000 four-channel transmitter, includes three coil relays, Bluetooth®	2 lb	Consult
176650	MSI-7000 four-channel transmitter, no relays, Wi-Fi	2 lb	$1,010.00
176653	MSI-7000 four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,180.00
85-265 VAC Power Input			
159469	MSI-7000 four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$990.00
161950	MSI-7000 four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,150.00
176637 *	MSI-7000 four-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176640 *	MSI-7000 four-channel transmitter, includes three coil relays, Bluetooth®	2 lb	Consult
176647	MSI-7000 four-channel transmitter, no relays, Wi-Fi	2 lb	$1,040.00
176651	MSI-7000 four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,210.00
Receivers			
5-6 VDC Power Input			
160016	MSI-7000 four-channel receiver to provide an analog output signal: 4-20 mA, 0-20 mA, 0-5 VDC, 0-10 VDC, ±5 VDC, ±10 VDC, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,120.00
160017	MSI-7000 four-channel receiver to provide RS232 serial output	2 lb	$1,080.00
7-36 VDC Power Input			
159478	MSI-7000 four-channel receiver to provide RS232 serial output	2 lb	$1,125.00
159476	MSI-7000 four-channel receiver to provide an analog output signal: 4-20 mA, 0-20 mA, 0-5 VDC, 0-10 VDC, ±5 VDC, ±10 VDC, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,260.00
85-265 VAC Power Input			
159477	MSI-7000HD four-channel receiver to provide RS232 serial output	2 lb	$1,050.00
159475	MSI-7000HD four-channel receiver to provide an analog output signal: 4-20 mA, 0-20 mA, 0-5 VDC, 0-10 VDC, ±5 VDC, ±10 VDC, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,360.00

Bluetooth modems only work with certain Android devices. Please contact MSI for potential applications.

Options/Accessories

Part #	Description	Price
162172	Charger, TranSend™ for 6V SLA battery	$63.00
162173	Battery, TranSend 6V SLA	$120.00
162175	Enclosure, TranSend for 6V SLA battery	$320.00
160109	AC adaptor, TranSend 6V	$53.00
143531	Power cord, 6 V SLA battery charger EU	$27.00
143533	Power cord, 6 V SLA battery charger, Australia	$48.00
143534	Power cord, 6 V SLA battery charger, UK	$42.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$53.00
162178	Antenna extension kit, 6 ft coax cable	$440.00
139309	Antenna kit, long range Omni with 3 m coax cable	$460.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$455.00
197013	Antenna extension kit, 20 ft	$470.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$485.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$375.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$430.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$140.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector	$180.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector	$170.00
145085	RS-232 serial cable, nine-pin unterminated	$120.00
182244	GoDex portable printer (compatible with Android phone or tablet app)	Consult

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TranSend™ MSI-7001
Wireless Load Cell Interface System

Specifications

Power:
5-6 VDC, 7-36 VDC 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16x 350Ω or 32x 700Ω load cells

Standard Antenna:
1/2 wave 2dBi, articulated

Frequency:
Direct sequence spread spectrum at 2.4 GHz, 802.15.4

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

Digital I/O:
Three coil relays available on select models

Circuit Protection:
RFI, EMI, ESD protection

Serial Port:
Full duplex RS-232

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

Enclosure:
NEMA Type 4 (IP66), aluminum black powder coated (excludes wall cube model)

Additional RF Options:
Wi-Fi
Bluetooth®
Cellular (consult)
802.15.4 FHSS

Warranty:
One-year limited

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
- Auto-off mode - selectable for 15, 30, 45, 60 minutes or off
- Auto-sleep mode - power down during non-use, power up with weight change or key press
- Serial communication cable included with all transmitters

Additional HD Features

- IP68 milled aluminum enclosure
- Second radio modem available

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC Power Input			
160330	MSI-7001 single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$885.00
176644 *	MSI-7001 single-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176655	MSI-7001 single-channel transmitter, no relays, Wi-Fi	2 lb	$930.00
7-36 VDC Power Input			
160329	MSI-7001 single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$935.00
176645 *	MSI-7001 single-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176656	MSI-7001 single-channel transmitter, no relays, Wi-Fi	2 lb	$985.00
85-265 VAC Power Input			
160328	MSI-7001 single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$965.00
176643 *	MSI-7001 single-channel transmitter, no relays, Bluetooth®	2 lb	Consult
176654	MSI-7001 single-channel transmitter, no relays, Wi-Fi	2 lb	$1,010.00
Receivers			
5-6 VDC Power Input			
160337	MSI-7001 single-channel receiver to provide a mV signal to a digital weight indicator, RF 802.15.4, 2.4 GHz	2 lb	$935.00
160334	MSI-7001 single-channel receiver to provide an analog output signal: 4-20 mA, 0-20 mA, 0-5 VDC, 0-10 VDC, ±5 VDC, ±10VDC, RF 802.15.4, 2.4 GHz	2 lb	$990.00
161941	MSI-7001 single-channel receiver to provide RS232 serial output	2 lb	$730.00
7-36 VDC Power Input			
160336	MSI-7001 single-channel receiver to provide a mV signal to a digital weight indicator. RF 802.15.4, 2.4 GHz	2 lb	$1,020.00
161939	MSI-7001 single-channel receiver to provide RS232 serial output	2 lb	$835.00
160333	MSI-7001 single-channel receiver to provide an analog output signal: 4-20 mA, 0-20 mA, 0-5 VDC, 0-10 VDC, ±5 VDC, ±10 VDC, RF 802.15.4, 2.4 GHz	2 lb	$1,120.00
85-265 VAC Power Input			
160335	MSI-7001 single-channel receiver to provide a mV signal to a digital weight indicator, RF 802.15.4, 2.4 GHz	2 lb	$1,070.00
161938	Receiver to provide RS232 serial output	2 lb	$895.00

* Bluetooth modems only work with certain Android devices. Please contact MSI for potential applications.

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TranSend™ MSI-7001
Wireless Load Cell Interface System

Options/Accessories

Part #	Description	Price
162177	Cordset, TranSend, pre-wired for use with single channel transmitters or non-relay based receivers	$120.00
164865	Cable, 4 m, one-channel, mV/V output, LC input	$135.00
165648	Cable, 5 m, one-channel, mV/V output, LC input	$145.00
165651	Cable, 10 m, one-channel, mV/V output, LC input	$205.00
162184	Load cell connector, TranSend, field wireable, 4-6 mm straight. For use with single channel transmitters and all receivers.	$55.50
162185	Load cell connector, TranSend, field wireable, 6-8 mm straight. For use with single channel transmitters and all receivers.	$55.50
162186	Load cell connector, TranSend, field wireable, 4-6 mm right angle. For use with single channel transmitters and all receivers.	$55.50
162187	Load cell connector, TranSend, field wireable, 6-8 mm right angle. For use with single channel transmitters and all receivers.	$55.50
145084	Cable, 2 m, one-channel, analog output	$58.00
144400	Cable, 5 m, one-channel, analog output	$90.00
168903	Cable, 10 m, one-channel, analog output	$135.00
Consult	Straight connector, analog output, field wire able, 4-6 mM OD	Consult
Consult	Straight connector, analog output, field wire able, 6-8 mM OD	Consult
Consult	Right angle connector, analog output, field wire able, 4-6 mM OD	Consult
Consult	Right angle connector, analog output, field wire able, 6-8 mM OD	Consult
162172	Charger, TranSend™ for 6V SLA battery	$63.00
162173	Battery, TranSend 6V SLA	$120.00
162175	Enclosure, TranSend for 6V SLA battery	$320.00
160109	AC adaptor, TranSend 6V	$53.00
143531	Power cord, 6 V SLA battery charger EU	$27.00
143533	Power cord, 6 V SLA battery charger, Australia	$48.00
143534	Power cord, 6 V SLA battery charger, UK	$42.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$53.00
162178	Antenna extension kit, 6 ft coax cable	$440.00
139309	Antenna kit, long range Omni with 3 m coax cable	$460.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$455.00
197013	Antenna extension kit, 20 ft	$470.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$485.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$375.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$430.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$140.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector	$180.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector	$170.00
145085	RS-232 serial cable, nine-pin unterminated	$120.00
182244	GoDex portable printer (compatible with Android phone or tablet app)	Consult

TranSend™ MSI-7000HD
Wireless Load Cell Interface System

Specifications

Power:
5-6 VDC, 7-36 VDC 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16x 350Ω or 32x 700Ω load cells

Standard Antenna:
1/2 wave 2dBi, articulated

Frequency:
Direct sequence spread spectrum at 2.4 GHz, 802.15.4

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

Digital I/O:
Three coil relays available

Circuit Protection:
RFI, EMI, ESD protection

Serial Port:
Full duplex RS-232

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

Enclosure:
IP68

Additional RF Options:
Wi-Fi
Bluetooth®
Cellular (consult)
802.15.4 FHSS

Warranty:
One-year limited

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
- Auto-off mode - selectable for 15, 30, 45, 60 minutes or off
- Auto-sleep mode - power down during non-use, power up with weight change or key press
- Serial communication cable included with all transmitters

Additional HD Features

- IP68 milled aluminum enclosure
- Second radio modem available

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC Power Input			
177944	MSI-7000HD four-channel 7-36VDC, three coil relays, 802.15.4		$1,980.00
177952 *	MSI-7000HD four-channel 7-36VDC, three coil relays,Bluetooth		Consult
177997	MSI-7000HD four-channel 7-36VDC, three coil relays, Wi-Fi		$1,990.00
7-36 VDC Power Input			
177945	MSI-7000HD four-channel 9-36VDC isolated, three coil relays, 802.15.4		$2,060.00
177953 *	MSI-7000HD four-channel 9-36VDC isolated, three coil relays,Bluetooth		Consult
177998	MSI-7000HD four-channel 9-36VDC isolated, three coil relays, Wi-Fi		$2,080.00
184002	7000HD Half-plate mounted, FHSS, DC (battery) powered (half plate battery power supply sold separately)		Consult
85-265 VAC Power Input			
177942	MSI-7000HD four-channel 85-265VAC, three coil relays, 802.15.4		$2,020.00
177950 *	MSI-7000HD four-channel 85-265VAC, three coil relays, Bluetooth®		Consult
177995	MSI-7000HD four-channel 85-265VAC, three coil relays, Wi-Fi		$2,040.00

* Bluetooth modems only work with certain Android devices. Please contact MSI for potential applications.

TranSend™ MSI-7000HD
Wireless Load Cell Interface System

Options/Accessories

Part #	Description	Price
187424	Dual xBee option kit for 7000HD with TNC connector	$190.00
162178	Antenna extension kit, 6 ft coax cable	$440.00
139309	Antenna kit, long range Omni with 3 m coax cable	$460.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$455.00
197013	Antenna extension kit, 20 ft	$470.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$485.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$375.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$430.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$140.00
148624	RS-232/RS-485 serial cable	$125.00
143348	Cordset IP68, 5-pin	$120.00
182244	GoDex portable printer (compatible with Android phone or tablet app)	Consult

TranSend™ MSI-7001HD
Wireless Load Cell Interface System

Specifications

Power:
5-6 VDC, 7-36 VDC 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16x 350Ω or 32x 700Ω load cells

Standard Antenna:
1/2 wave 2dBi, articulated

Frequency:
Direct sequence spread spectrum at 2.4 GHz, 802.15.4

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

Digital I/O:
Three coil relays available on select models

Circuit Protection:
RFI, EMI, ESD protection

Serial Port:
Full duplex RS-232

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

Enclosure:
IP68

Additional RF Options:
Wi-Fi
Bluetooth®
Cellular (consult)
802.15.4 FHSS

Warranty:
One-year limited

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
- Auto-off mode - selectable for 15, 30, 45, 60 minutes or off
- Auto-sleep mode - power down during non-use, power up with weight change or key press
- Serial communication cable included with all transmitters

Additional HD Features

- IP68 milled aluminum enclosure
- Second radio modem available

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC			
178010	MSI-7001HD two-channel 5-6VDC, 802.15.4		$1,100.00
178014 *	MSI-7001HD two-channel 5-6VDC, Bluetooth®		Consult
178018	MSI-7001HD two-channel 5-6VDC, Wi-Fi		$1,190.00
7-36 VDC			
178011	MSI-7001HD two-channel 7-36VDC, 802.15.4		$1,180.00
178015 *	MSI-7001HD two-channel 7-36VDC, Bluetooth®		Consult
178019	MSI-7001HD two-channel 7-36VDC, Wi-Fi		$1,200.00
85-265 VAC Isolated			
178012	MSI-7001HD two-channel 9-36VDC isolated, 802.15.4		$1,190.00
178016 *	MSI-7001HD two-channel 9-36VDC isolated, Bluetooth®		Consult
178020	MSI-7001HD two-channel 9-36VDC isolated, Wi-Fi		$1,260.00
85-265 VAC			
178021	MSI-7001HD two-channel 85-265VAC, 802.15.4		$1,210.00
178013 *	MSI-7001HD two-channel 85-265VAC, Bluetooth®		Consult
178017	MSI-7001HD two-channel 85-265VAC, W-iFi		$1,240.00

* Bluetooth modems only work with certain Android devices. Please contact MSI for potential applications.

TranSend™ MSI-7001HD
Wireless Load Cell Interface System

Options/Accessories

Part #	Description	Price
162172	Charger, TranSend™ for 6V SLA battery	$63.00
162173	Battery, TranSend 6V SLA	$120.00
162175	Enclosure, TranSend for 6V SLA battery	$320.00
160109	AC adaptor, TranSend 6V	$53.00
143531	Power cord, 6 V SLA battery charger EU	$27.00
143533	Power cord, 6 V SLA battery charger, Australia	$48.00
143534	Power cord, 6 V SLA battery charger, UK	$42.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$53.00
162178	Antenna extension kit, 6 ft coax cable	$440.00
139309	Antenna kit, long range Omni with 3 m coax cable	$460.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$455.00
197013	Antenna extension kit, 20 ft	$470.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$485.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$375.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$430.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$140.00
148624	RS-232/RS-485 serial cable	$125.00
143348	Cordset IP68, 5-pin	$120.00
182244	GoDex portable printer (compatible with Android phone or tablet app)	Consult

MSI-9000 CellScale™

Specifications

Enclosure:
NEMA Type 4, IP65 milled anodized aluminum with O-ring gaskets
NEMA Type 6, IP67 with optional long range antenna

Weight:
3.5 lb (1.6 kg)

Annunciators:
8 LED status lamps for Power, Setpoints, Comm Port, Excitation & RF Modem

Real-Time Clock:
USA or European format programmable

Power Input:
9-30 VDC (Internal 85-265 VAC power supply optional)

Operating Temperature:
-4°F to 158°F (-20°C to 70°C)
Legal for Trade: 14°F to 104°F (-10°C to 40°C)

Scale Inputs:
2 sensor inputs and 6 terminal connections

Excitation:
5 V (+5 V relative to ground)

Calibration:
Digital via input comport or RF with other CellScale weighing components.
Programmable calibration settings, include: AZM, Motion, Filter, Zero, Units, Capacity and Divisions

Digital Filtering:
Two-stage programmable digital filtering

Totalization, Statistics and Product IDs:
Push-button or automatic with each ID register. Up to 32 alphanumeric ID registers

Radio Link:
FHSS at 2.4 GHz (up to 64 network selections)

Radio Link Effective Range:
Typically 500 ft (150 m) indoor, 1,000 ft (300 m) outdoor with standard antennas.
(See optional antennas for longer range)

Standard Antenna:
1/2 wave 2dBi, articulated

RFI/EMI Shielding:
Exceeds NIST HB44 and CE Standards

Data I/O:
2 programmable comports supporting RS-232 or RS-422

Push Button Inputs:
2 inputs on power connector and 1 isolated input on setpoints connector

Connectors:
12-pin MIL-C-26482 for load sensor input Turck compatible Pico for RS-232 output

Math Channels:
8 math channels programmable for arithmetic formula processing

Internal Setpoints:
3 60 V at 350 mA internal programmable solid state relay contacts

Warranty:
One-year limited

Approvals:
NTEP CC 05-077

Standard Features

- 2.4 GHz frequency hopping spread spectrum
- Two scale inputs and excitation with remote sensing (see accessories formatting connector)
- Power/switch cable, 13 ft (4 m) for 9-30 VDC input with two programmable switch inputs
- RS-232, RS-422 and RS-485 I/O with 13 ft (4 m) interface cable
- Three internal solid state relays for setpoint control
- Real-time clock
- NEMA Type 4, IP65 enclosure (NEMA Type 6, IP67 with long-range antenna)

Approvals

NTEP

Measurement
Canada
Approved

MSI-9000 CellScale™

Part Number/Price

Part #	Description	Price
138366	Two channel A/D 85-265VAC 47-440Hz, 130-300VDC, 7-25VDC (consult factory for other configurations)	$3,475.00

Options/Accessories (Contact MSI for application consultation)

Part #	MSI Part #	Description	Price
Consult	Consult	NTEP Certified (contact factory for specifications)	Consult
Consult	Consult	Internal AC/DC power supply (85-265 VAC, 47-440 Hz/130-300 VDC) includes a separate, independent 9-30 VDC power input	$320.00
137467	Consult	External 85-265 VAC, 47-440 Hz/130-300 VDC power supply for indoor and outdoor installations	$560.00
144331	Consult	Five dBi gain vehicle/cab mount whip antenna, includes 17 ft/5.2 m coaxial cable	$69.00
Consult	Consult	Single or dual 4-20 mA output. Provides programmable current output for direct connection to PLC's and other data acquisition equipment. Note: See 4-20 mA option specification sheet for available product configurations	$490.00 $540.00
144091	Consult	Non-terminated 4-20 mA cord set, 13 ft/4 m (longer lengths available by special order)	$115.00
143343	Consult	Setpoints output cable, 13 ft/4 m for access to internal SS relays	Consult
Consult	Consult	Non-terminated serial cable for communication port connection, 13 ft/4 m (longer lengths available by special order)	$110.00
Consult	Consult	Pre-wired load cell cable (various lengths for single and dual channel available)	Consult
Consult	Consult	Second A/D module (4 scale inputs - adds second 12-Pin connector)	$675.00
Consult	Consult	CellScale Virtual Monitor (CVM) application software (enables PC to emulate scale indicator., contact factory for assistance)	Consult
Consult	Consult	Modem only equipped version (CellScale A/D removed)	$515.00
Consult	Consult	Non-RF equipped version (CellScale RF modem removed)	$965.00
137096	Consult	MSI-9002 breakout/summing box; 4 in (1 out or 4 in (2 out)	$820.00
137370	Consult	MSI-9008 multiplexer; 8 in (1 out (expands single channel into 8)	$1,240.00
Consult	Consult	Wi-Fi Ethernet Connectivity (802.11b - contact factory for assistance)	$400.00
143297	Consult	12-Pin mating connector for single or dual scale input	$63.00
Consult	Consult	Long range antenna, 300-500 m omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable	Consult
143466	12147	Antenna, 9 dBi	$470.00
144330	13205	Antenna, 9 dBi corner reflector	Consult
144329	13204	Antenna, 14 dBi corner reflector	Consult
144334	13209	Antenna cable, 3 m	$63.00
143977	12750	Antenna, YAGI, 15 dBi	Consult
144332	13207	Vehicle antenna cable	$140.00
148624	501705-0001	Serial cable DB9	$125.00
150990		RF Remote option (must be ordered with PN 153549 to work properly)	$980.00

MSI-9020 CellScale™ RF CellModem

Specifications

Enclosure:
NEMA Type 4, IP65 milled anodized aluminum with O-ring gaskets
NEMA Type 6, IP67 with optional long range antenna

Weight:
3.5 lb (1.6 kg)

Annunciators:
3 LED status lamps for Power, Data TX/RX and Configuration

Power Input:
9-30 VDC (Internal 85-265 VAC, 47-440 Hz power supply optional)

Operating Temperature:
-4°F to 158°F (-20°C to 70°C)
Legal for Trade: 14°F to 104°F (-10°C to 40°C)

Radio Link:
FHSS at 2.4 GHz (up to 64 network selections)

Radio Link Effective Range:
Typically 500 ft (150 m) indoor, 1000 ft (300 m) outdoor with standard antennas.
(See optional antennas for longer range)

Standard Antenna:
1/2 wave 2dBi, articulated

RFI/EMI Shielding:
Exceeds NIST HB44 and CE Standards

Data I/O:
1 Comm Port with two connector interfaces for RS-232 and RS-422

Warranty:
One-year limited

Approvals:
NTEP CC 05-077

Standard Features

- Modem only component; provides serial interface with computers, printers and scoreboards to a CellScale network
- 2.4 GHz spread spectrum frequency hopping
- Power cable, 13 ft (4 m) for 9-30 VDC input
- One communication port; RS-232 or RS-422, 13 ft (4 m) interface cable
- NEMA Type 4, IP65 enclosure (NEMA Type 6, IP67 with long-range antenna)

Approvals

Part Number/Price

Part #	MSI Part #	Description	Est. Weight	Price
138477	502536-0001	MSI-9020 RF CellModem, DC power	7 lb	$2,550.00
138478	-	MSI-9020 RF CellModem, AC/DC power	-	Consult

Options/Accessories

Part #	MSI Part #	Description	Est. Weight	Price
Consult	Consult	Internal 85-265 VAC, 47-440 Hz power supply	-	$370.00
143466	12147	Long range antenna, 300 m-500 m omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable	1 lb	$470.00
Consult	Consult	9 dBi or 14 dBi gain corner reflector antenna	1 lb	Consult
Consult	Consult	5 dBi gain vehicle/cab mount whip antenna, includes 17 ft/5.2 m coaxial cable	1 lb	Consult
137567	502046-0001	Non-terminated serial cable for communication port connection, 13 ft/4 m longer lengths available by special order	1 lb	$120.00
Consult	Consult	CellScale Virtual Monitor (CVM) application software (enables PC to emulate scale indicator)	-	Consult

SCT-1100
Signal Conditioning Transmitter

SCT-1100-AN in Plastic Enclosure

SCT-1100-AN with Analog Output

Standard Features

- Up to four independent scales or four load cell inputs
- Quick menu for real and theoretical calibration
- Red LED display (13mm) and six LEDs show active functions
- 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 presettable tare, scale switch, setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, setting of APW in counting mode, simulation of key pressure
- Modbus RTU ASCII protocol

Approvals

NTEP

OIML

EU
NAWI / MID
CERTIFIED

C (UL) US
LISTED

UK
CA

Specifications

Power:
12/24 VDC

Power Consumption:
70 mA min – 100 mA max

Excitation Voltage:
5VDC, 120 mA, 8 x 350 ohm

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 resolution: 1.5 million counts
Weight display resolution: 800,000

Digital Inputs/Outputs:
Two inputs: 12/24 VDC
Two outputs: 150 mA 48 VAC/ 150 mA 60 VDC

Serial Port:
1-RS-485, 1-RS-232

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

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

Annunciators:
Net, center of zero, stability

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

Temperature & Humidity:
Working temperature: 5° F to 104° F
(-15° C to 40° C)
Humidity: 85% non-condensing

Dimensions (W x H x D):
4.17 in x 3.54 in x 2.28 in
(106 mm x 90 mm x 58 mm)

Weight:
1 lb (0.5 kg)

Rating/Material:
NEMA Type 1 plastic pluggable connectors

Warranty:
One-year limited warranty

Approvals:
NTEP CC 20-046
Measurement Canada AM-6165C
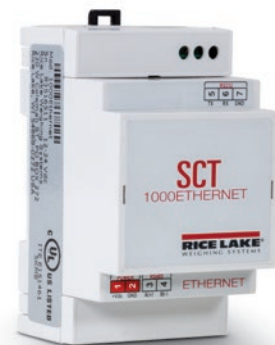OIML
cULus
EU Legal for Trade

Part Number/Price

Part #	Description	Est. Weight	Price
202101	Indicator, SCT-1100-AN four load cell input with Analog Output	1 lb	$450.00
197011	Indicator, SCT-1100-AN four load cell input with Analog Output in plastic enclosure	1 lb	$625.00

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	12VDC 1.2A DIN rail mount power supply	1 lb	$140.00
119244	24VDC 1.3A DIN rail mount power supply	1 lb	$160.00

SCT-1000
Serial to Ethernet converter

SCT-2200
Signal Conditioning Transmitter

Specifications

Power:
12/24 VDC
Power Consumption:70 mA min – 100 mA max

Excitation Voltage:
5 VDC, 120 mA, 8 x 350 ohm

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 resolution: 1.5 million counts
Weight display resolution: 800,000

Digital Inputs/Outputs:
Two inputs: 12/24 VDC
Two outputs:150 mA 48 VAC/ 150 mA 60 VDC

Serial Port:
1-RS-485, 1-RS-232

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

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

Annunciators:
Net, center of zero, stability

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

Temperature & Humidity:
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

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

Weight:
1 lb (0.5 kg)

Rating/Material:
NEMA Type 1 plastic pluggable connectors

Warranty:
One-year limited warranty

Approvals:
NTEP CC 20-046
Measurement Canada AM-6165C
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EU Legal for Trade

SCT2200 Pictured with optional EtherNet/IP Module

Standard Features

- HUB Mode connects up to 16 transmitters to one fieldbus
- 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 with six-digits (8 mm) and six LEDs show active functions
- 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 presettable tare, scale switch, setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, simulation of key pressure, Modbus RTU
- Two RS-485 ports for "daisy-chain" network connections
- Printer management on second serial port available
- Multi-range function allows for subdividing the scale capacity in two, each up to 3,000 divisions
- Modbus RTU ASCII protocol

Approvals

NTEP
cUL
OIML
EU NAWI / MID CERTIFIED
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UKCA

Part Number/Price

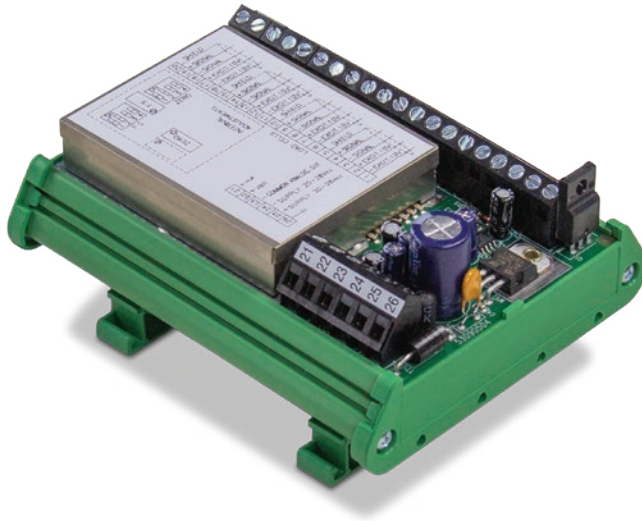| Part #	Description	Est. Weight	Price
Transmitters			
202103 *	Indicator, SCT-2200 for scale input to be used with fieldbus module	1 lb	$325.00
202104	Indicator, SCT-2200-AN with Analog Output	1 lb	$450.00
Fieldbus			
182592	Fieldbus, SCT-2200, Profinet module	1 lb	$550.00
182594	Fieldbus, SCT-2200, Wi-Fi module	1 lb	$460.00
194343	Fieldbus, SCT-2200, Ethernet TCP/IP and Wi-Fi	1 lb	$550.00
182593	Fieldbus, SCT-2200, Profibus module	1 lb	$350.00
182591	Fieldbus, SCT-2200, EtherNet/IP module	1 lb	$550.00
182596	Fieldbus, SCT-2200, DeviceNet module	1 lb	$550.00
182598	Fieldbus, SCT-2200, EtherCAT module	1 lb	$550.00
182597	Fieldbus, SCT-2200, CANopen module	1 lb	$550.00
196694	Fieldbus, SCT-2200, Modbus TCP module	1 lb	$550.00
182599	Cable with RJ45 plugs, 6 in length	1 lb	$11.00

__How to Order the SCT-2200 for use with fieldbus module__
Order SCT-2200 transmitter scale-input module.
Order fieldbus module (HUB mode connects up to 16 transmitters to one fieldbus module).
Order 1-cable (PN 182599) for each scale-input module in the HUB.

Options/Accessories

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

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SCT-3300
Signal Conditioning Transmitter

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

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	$350.00

Options/Accessories

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

Specifications

Power:
Input: 20-28 VDC
Power consumption: 8 W

Excitation Voltage:
10 VDC, 170 mA, 6 x 350 ohm

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

Resolution:
System linearity: ± 0.01% full scale

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

Temperature & Humidity:
Working temperature: 14° F to 122° F
(-10° C to 50° C)
Humidity: 85% non-condensing

Dimensions (W x H x D):
4.56 in x 3.72 in x 2.4 in (114 mm x 93 mm x 60 mm)

Weight:
0.5 lb (0.2 kg)

Rating/Material:
DIN rail mount: NEMA Type 1

Warranty:
One-year limited warranty

Specifications

Power:
Input: 12 -24 VDC
Power consumption: 5 W

Excitation Voltage:
5VDC, 120mA, 8 x 350 ohm

Analog Signal Input Range:
+/-19.5mV

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

A/D Sample Rate:
80 Hz

Resolution:
Internal resolution: 16 million counts
Weight display resolution: 999,999
System Linearity: ± 0.01% full scale

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

Serial Port:
RS-485 or RS-232 simplex supports up to 115,200 bps

Analog Output:
Optoisolated, 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 10k ohm)

Display:
0.3 in (8 mm), six digit, 7 segment LED
Annunciators: Net, center of zero, stability, KG, G, LB
Annunciators test status of inputs/outputs

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

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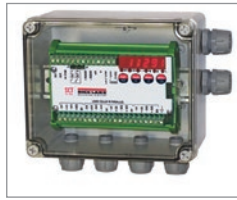Humidity: 85% non-condensing

Dimensions (WxHXD):
DIN Rail Mount: 4.84 x 3.62 x 1.96 in
(123 x 92 x 50 mm)
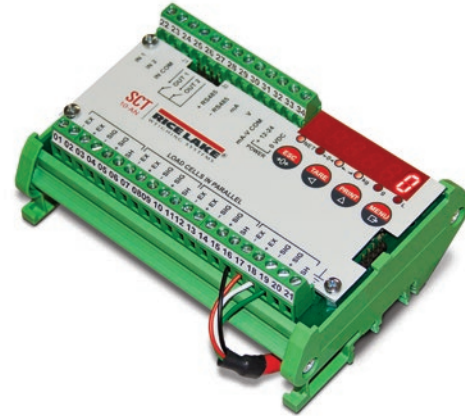IP67 Enclosure: 6.69 x 5.51 x 3.74 in
(170 x 140 x 95 mm)

Weight:
1 lb (0.5 kg)

Warranty:
One-year limited warranty

SCT-10 in Plastic Enclosure

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
- One serial port, RS-232 simplex and RS-485 connection
- Supports ASCII or MODBUS-RTU protocols

Approvals

Part Number/Price

Part #	Description	Est. Weight	Price
129393	SCT-10 converter with Analog Output	1 lb	$475.00
129394	SCT-10 converter with Analog Output in enclosure	1 lb	$625.00
131129	Installation manual	1 lb	$25.00
199687	DIN rail clip right & left end clamp		$10.00

Options/Accessories

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

INDICATORS / CONTROLLERS

www.ricelake.com | Phone: 800-472-6703

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SCT-20
Signal Conditioning Transmitter

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-485 half duplex or RS-232 transmit only connection

Approvals

Part Number/Price

Part #	Description	Est. Weight	Price
129396	SCT-20 converter with Analog Output	1 lb	$475.00
129397	SCT-20 converter with DeviceNet™	1 lb	$625.00
129558	SCT-20 converter with Profibus™ DP	1 lb	$675.00
129398	SCT-20 converter with EtherNet/IP™	1 lb	$850.00
132534	SCT-20 converter with Ethernet TCP/IP™	1 lb	$850.00
156903	SCT-20 converter with Modbus/TCP	1 lb	$850.00
131128	Installation manual	1 lb	$25.00
NTEP Approved			
162883	SCT-20 converter with Analog Output	1 lb	$525.00
162886	SCT-20 converter with EtherNet/IP single port	1 lb	$925.00
162887	SCT-20 converter with Ethernet TCP/IP	1 lb	$925.00

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

Options/Accessories

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

Specifications

Power:
Input: 12 -24 VDC
Power consumption: 5 W

Excitation Voltage:
5 VDC, 120 mA, 8 x 350 ohm

Analog Signal Input Range:
+/- 39mV

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

A/D Sample Rate:
300 Hz

Resolution:
Internal resolution: 16 million counts
Weight display resolution: 999,999
System linearity: ± 0.01% full scale

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

Serial Port:
RS-485 half duplex or RS-232 transmit only
supports up to 115,200 bps

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

Display:
0.3 in (8 mm), six digit, seven segment LED
Annunciators: Net, center of zero, stability, KG, G, LB

Keyboard:
4-key membrane panel, tactile feel
Zero, Tare, Print, Menu, Escape, Left &
Up Navigation, Enter

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

Dimensions (W x H x D):
SCT converter: 0.98 x 4.52 x 4.72 in
(25 x 115 x 120 mm)

Weight:
1 lb (0.5 kg)

Rating/Material:
SCT enclosure: NEMA Type 1 plastic pluggable
connectors

Warranty:
One-year limited warranty

Specifications

Power:
Input: 12 -24 VDC
Power consumption: 3 W

Excitation Voltage:
5 VDC, 120 mA, 8 x 350 ohm

Analog Signal Input Range:
+/-39mV

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

A/D Sample Rate:
300 Hz

Resolution:
Internal resolution: 16 million counts
System linearity: ± 0.01% full scale

Serial Port:
RS-485

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

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

Keyboard:
Control knob and DIP switches

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

Dimensions (W x H x D):
SCT converter: 3.54 x 3.74 x 2.36 in
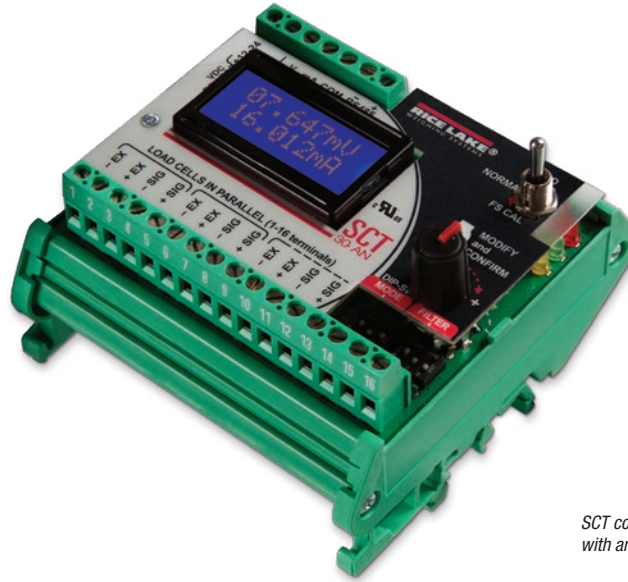(90 x 95 x 60 mm)

Weight:
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

Warranty:
One-year limited warranty

*SCT converter
with analog output*

Standard Features

- LCD display, 5 mm, eight digits
- 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

Approvals

Part Number/Price

Part #	Description	Est. Weight	Price
156794	SCT-30 converter with Analog Output	1 lb	$375.00
156834	SCT-30 converter with Analog Output in enclosure	1 lb	$525.00
131129	Installation manual	1 lb	$25.00
199707	DIN rail clip right & left end clamp		$10.00

Options/Accessories

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

SCT-40
Signal Conditioning Transmitter

Standard Features

- LCD display, 60 x 32 mm
- 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™ , Profibus™ or EtherNet/IP™ 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-485 half duplex or RS-232 transmit only connection

Approvals

c **UL** US

Part Number/Price

Part #	Description	Est. Weight	Price
170470	SCT-40 with Analog Output	1 lb	$675.00
170471	SCT-40 with DeviceNet	1 lb	$950.00
170472	SCT-40 with Profibus	1 lb	$950.00
170473	SCT-40 with EtherNet/IP	1 lb	$950.00
170474	SCT-40 with Ethernet TCP/IP	1 lb	$900.00
170475	SCT-40 with Modbus TCP	1 lb	$950.00
170476	SCT-40 with Profinet I/O	1 lb	$950.00
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	12VDC 1.2A DIN rail mount power supply	1 lb	$140.00
119244	24VDC 1.3A DIN rail mount power supply.	1 lb	$160.00

Specifications

Power:
Input: 12 -24 VDC
Power consumption: 5W

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

Analog Signal Input Range:
+/-39mV

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

A/D Sample Rate:
600 Hz

Resolution:
Internal resolution: 16 million counts
Weight display resolution: 999,999
System linearity: ± 0.01% full scale

Digital Inputs/Outputs:
3 inputs 5-24 VDC, 5 outputs, 115 VAC/150 mA

Serial Port:
RS-485 half duplex or RS-232 transmit only
supports up to 115,200 bps

Analog Output:
Optoisolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC (min 10,000 ohm)

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

Keyboard:
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

Dimensions (W x H x D):
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)

Rating/Material:
DIN rail mount: NEMA Type 1

Warranty:
One-year limited warranty

Specifications

Vernier:
Two ranges; one is equal to the sum of the 0.05 mV/V switch and the 0 mV/V-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 ohms,
X1= 350 ohms (one standard load cell),
X4= 87.5 ohms (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 mV/V-3 mV/V in 0.01 mV/V steps

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

Standard Features

- Designed for high resolution,
- 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	$945.00

Options/Accessories

Part#	Description	Price
21116	Cable with banana plugs	$68.00

RICE LAKE