Indicators / Controllers

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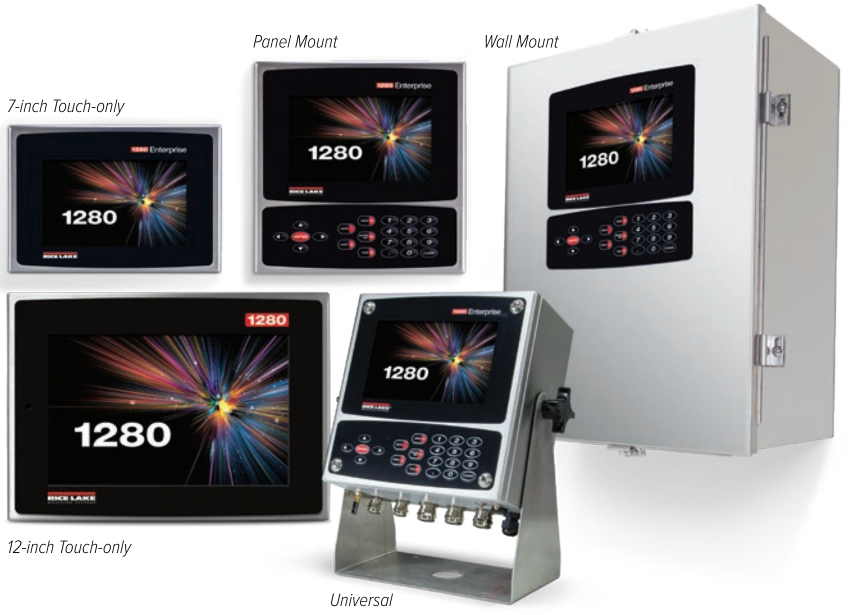
1280 Enterprise™ Series

Programmable Color Touchscreen Weight Indicator and Controller



Approvals

NTEP OIML c UL us LISTED Measurement Canada Approved CE 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 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 & data tables
  - Customize and transfer data via email, FTP server and networked printers
  - Display data with line charts or bar graphs
  - iRite reporting of iQUBE2 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:
60W

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 Range:
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 10,000d
Measurement Canada AM-5980C, Class III/III HD 10,000d
OIML R76/2006-A-NL1-19.23 Class III/IIII 10,000d
EU Test Certificate TC8596
cULus Listed (Universal, Wall Mount)
cULus Recognized (Panel Mount)
CE Marked

1280 Enterprise™ Series

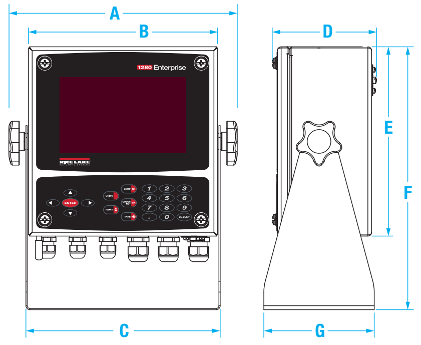
Programmable Color Touchscreen Weight Indicator and Controller

7-inch model with keypad

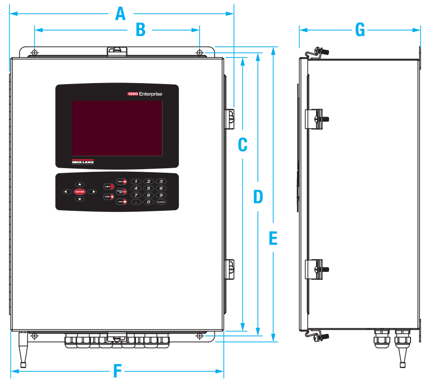
7-inch touch-only model

12-inch touch-only model

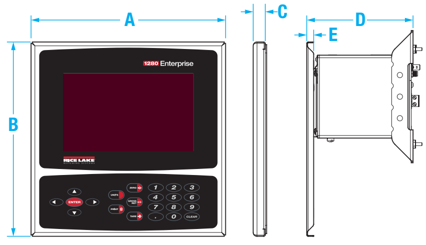
Numeric Keypad Models:



1280-2



1280-3



1280-4

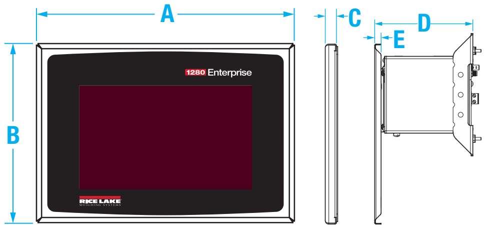
Dimensions

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)		

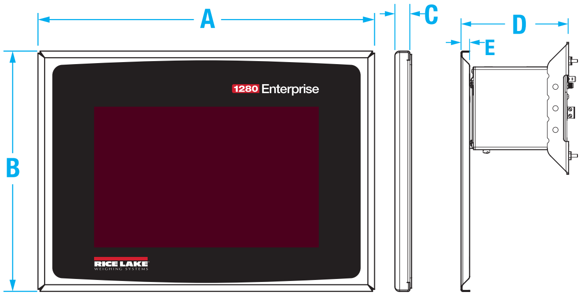
Wall Mount (1280-3)			
A	14.92 in (379 mm)	E	19.64 in (499 mm)
B	11.00 in (279 mm)	F	14.20 in (361 mm)
C	18.22 in (463 mm)	G	8.08 in (205 mm)
D	18.84 in (479 mm)		

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)		

1280 Enterprise™ Series

Programmable Color Touchscreen Weight Indicator and Controller

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	$3,550.00
171441 ††	1280 Universal	100-240 VAC	500 NIT	Single Scale Card	$3,550.00
171662 †	1280 Universal	115 VAC	500 NIT	Dual Scale Card	$3,750.00
172188 ††	1280 Universal	100-240 VAC	500 NIT	Dual Scale Card	$3,850.00
Panel Mount Enclosure with 500 NIT Display (1280-4)					
171663	1280 Panel Mount	100-240 VAC	500 NIT	Single Scale Card	$3,425.00
172186	1280 Panel Mount	100-240 VAC	500 NIT	Dual Scale Card	$3,650.00
Wall Mount Enclosure with 500 NIT Display (1280-3)					
173673 †	1280 Wall Mount	115 VAC	500 NIT	Single Scale Card	$3,950.00
174143 ††	1280 Wall Mount	100-240 VAC	500 NIT	Single Scale Card	$3,950.00
174144 †	1280 Wall Mount	115 VAC	500 NIT	Dual Scale Card	$4,250.00
174145 ††	1280 Wall Mount	100-240 VAC	500 NIT	Dual Scale Card	$4,250.00
Wall Mount Enclosure with 1000 NIT Display (1280-3)					
172184 †	1280 Wall Mount	115 VAC	1,000 NIT	Single Scale Card	$4,050.00
172185 ††	1280 Wall Mount	100-240 VAC	1,000 NIT	Single Scale Card	$4,050.00
206563 †	1280 Wall Mount	115 VAC	1,000 NIT	Dual Scale Card	$4,250.00
172187 ††	1280 Wall Mount	100-240 VAC	1,000 NIT	Dual Scale Card	$4,350.00
Touch-only 7 inch with 500 NIT Display (1280-5)					
186618	1280 Touch-only 7 in	100-240 VAC	500 NIT	Single Scale Card	$3,450.00
Touch-only 12 inch with 1500 NIT Display (1280-6)					
186465	1280 Touch-only 12 in	100-240 VAC	1,500 NIT	Single Scale Card	$4,075.00

† 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 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

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

Single A/D Scale

SINGLE SCALE

Excitation Voltage:
10 VDC bi-polar, 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	$13.00

Dual A/D Scale

Excitation Voltage:
10 VDC bi-polar, 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	$13.00

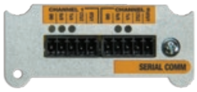
Digital I/O

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	$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	$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


SERIAL COMM

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

Part #	Description	Price
164685	Dual serial channel	$425.00

Single Analog Out

ANALOG OUTPUT/SINGLE

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

Part #	Description	Price
165366	Single analog out	$375.00

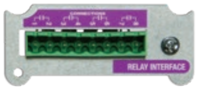
Dual Analog Out

ANALOG OUTPUT/DUAL

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 INTERFACE

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

Part #	Description	Price
164689	Relay card	$425.00

Analog Input

ANALOG INPUT/DUAL

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

Part #	Description	Price
164687	Dual analog input	$650.00

Data Exchange with PLC/DCS Systems

EtherNet/IP

NS
MS
LINK
EtherNet/IP

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

DeviceNet

NS
MS
DeviceNet

Part #	Description	Price
165793	DeviceNet	$620.00

Profinet

NS
MS
LINK
PROFINET IO

Part #	Description	Price
165794	Profinet	$620.00

Modbus TCP

NS
MS
LINK
MODBUS/TCP

Part #	Description	Price
165796	Modbus TCP	$620.00

Profibus DP

OP
ST
PROFIBUS DP-V1

Part #	Description	Price
165795	Profibus DP	$620.00

EtherCAT

RUN
ERR
IN
EtherCAT
OUT

Part #	Description	Price
179533	EtherCAT	$620.00

PowerLink

STS
ERR
P1
P2
POWERLINK

Part #	Description	Price
182319	PowerLink	$905.00

1280 Enterprise™ Series

Programmable Color Touchscreen Weight Indicator and Controller

Options/Accessories

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

Part #	Description	Price
Manuals and Software		
167659	Manual, Technical	$35.00
72809	Interchange database software	$295.00
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

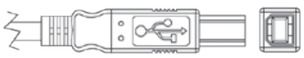
Part #	Description	Price
Displays		
163400	7 in 500 NIT display	$350.00
163399	7 in 1,000 NIT display	$450.00
182992	12 in 1,500 NIT display	$995.00
Boards		
179992	CPU board assembly includes face plate and fan plate	$1,100.00
199157	Controller box, CPU, power supply, backplane	$1,500.00
Power Supplies		
202512	AC power supply board	$180.00
202514	DC power supply board	$180.00
Overlays		
164121	Keypad, for panel & wall mount	$75.00
164120	Touchscreen, for panel & wall mount	$130.00
161731	Keypad, for universal	$75.00
161730	Touchscreen, for universal	$130.00
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

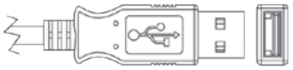
To have your option factory installed, please specify when placing your order.

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	$90.00
126477	**A** SEALED	**A** UNSEALED	3 m	$90.00
124701	**A** SEALED	**B** UNSEALED	3 m	$90.00
124702	**B** SEALED	**A** UNSEALED	3 m	$90.00
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	$90.00
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	$90.00
124707	RJ-45 SEALED	RJ-45 UNSEALED	2 m	$90.00
Ethernet Receptacles *(Receptacle is a socket)*				
176789	RJ-45 SEALED		0.75 m	$105.00
172734	RJ-45 SEALED		0.5 m	$90.00
126353	RJ-45 SEALED		0.25 m	$90.00
Cable and Receptacle Accessories				
124694	Cover for sealed receptacles			$13.00
124689	Cover for flash driver mounts on sealed receptacle			$25.00

Unsealed Connectors

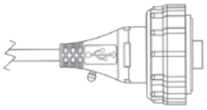


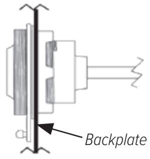
Type B



Type A

Sealed Connector





Sealed Receptacle

MSI-8000

RF Remote Display

Part Number/Price

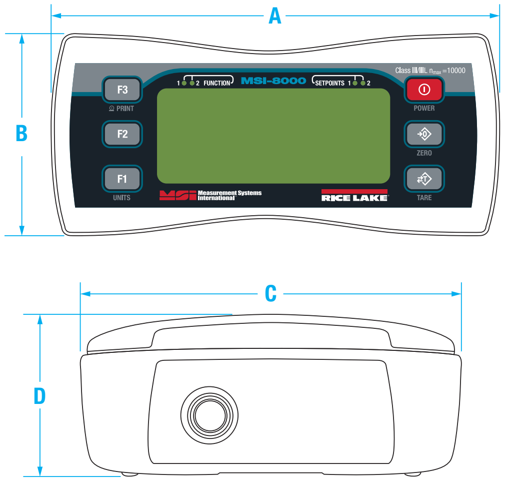
Part #	Description	Est. Weight	Price
139381	MSI-8000 RF remote display	5 lb	$1,415.00

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	$165.00
149550	Universal 115/230 VAC 50/60 Hz (EC plug standard) battery charger for MSI 8000 RF remote display	1 lb	$160.00
150964	DB9 female serial interface cable for MSI-8000 RF remote display	1 lb	$200.00
151095	Audible alarm	—	$315.00

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)



Standard Features

- 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
- 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)

(Contact MSI for application consultation)

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 screen

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

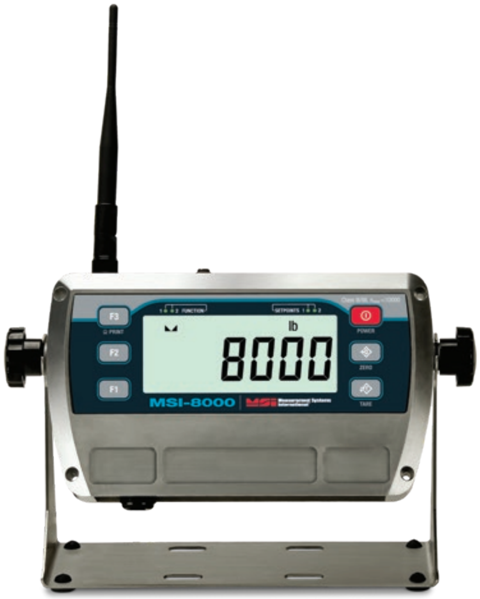
RF Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

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

Warranty:
One-year limited

MSI-8000HD

Indicator/Remote Display



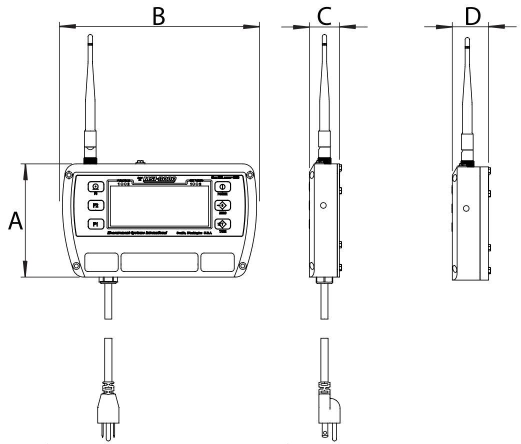
Approvals

Standard Features

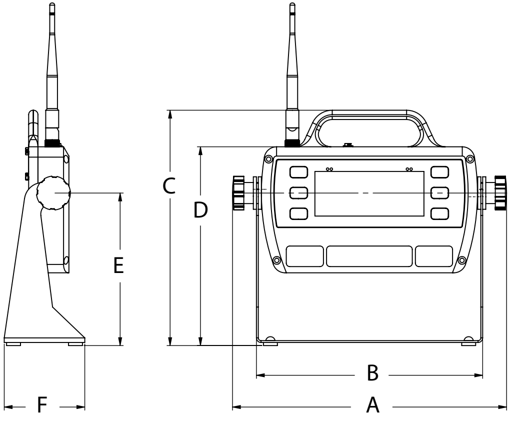
- Compatible with all ScaleCore™-based products including: MSI-7300 Dyna-Link 2, MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001 TranSend™, MSI-9600HT and MSI-6360
- LCD display
- IP68 milled aluminum enclosure
- Time and date
- Membrane keypad for remote-control functionality
- User-definable 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)

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

Specifications

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

Excitation Voltage:
4.8V 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

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

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, IP68 milled anodized aluminum with O-ring gaskets

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

Warranty:
One-year limited

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

Part Number/Price

Part #	Description	Est. Weight	Price
153591	ScaleCore RF/remote display/85 to 265 VAC	5 lb (2.5 kg)	$1,541.00
154853	ScaleCore RF/remote display/internal battery	5 lb (2.5 kg)	$1,670.00
160476	ScaleCore RF/remote display/7 to 36 VDC	5 lb (2.5 kg)	$1,485.00
159377	ScaleCore RF/remote display/18 to 72 VDC	5 lb (2.5 kg)	$1,520.00
159376	ScaleCore RF/remote display/9 to 36 VDC	5 lb (2.5 kg)	$1,520.00
158427	Meter/2 A/D inputs/85 to 265 VAC (non RF)	5 lb (2.5 kg)	$1,875.00
158428	Meter/2 A/D inputs/internal battery (non RF)	5 lb (2.5 kg)	$1,990.00
160478	Meter/2 A/D inputs/7 to 36 VDC (non RF)	5 lb (2.5 kg)	$1,670.00
159381	Meter/2 A/D inputs/18 to 72 VDC (non RF)	5 lb (2.5 kg)	$1,710.00
159380	Meter/2 A/D inputs/9 to 36 VDC (non RF)	5 lb (2.5 kg)	$1,710.00
158425	RF Meter/2 A/D inputs/85 to 265 VAC	5 lb (2.5 kg)	$1,895.00
158426	RF Meter/2 A/D inputs/internal battery	5 lb (2.5 kg)	$2,065.00
160477	RF Meter/2 A/D inputs/7 to 36 VDC	5 lb (2.5 kg)	$1,895.00
159379	RF Meter/2 A/D inputs/18 to 72 VDC	5 lb (2.5 kg)	$1,905.00
159378	RF Meter/2 A/D inputs/9 to 36VDC	5 lb (2.5 kg)	$1,905.00
176958	Wi-Fi meter/85/265 VAC	5 lb (2.5 kg)	$1,575.00
176960	Wi-Fi meter/internal battery	5 lb (2.5 kg)	$1,710.00
176964	Wi-Fi meter/7 to 36 VDC	5 lb (2.5 kg)	$1,520.00
176966	Wi-Fi meter/9 to 36 VDC	5 lb (2.5 kg)	$1,560.00
176968	Wi-Fi meter/18 to 72 VDC	5 lb (2.5 kg)	$1,560.00

Options/Accessories

Part #	Description	Price
155173	MSI-8000HD spare tilt stand option kit	$90.00
155193	MSI-8000HD Ethernet TCP/IP option kit wired	$430.00
162178	Antenna extension kit, 6 ft	$490.00
148624	MSI-8000HD serial RS-232 cable	$140.00
158779	MSI-8000HD two each coil relay option kit, 250 VAC/30 VDC 5A or 100 VDC 0.4A	$375.00
158780	MSI-8000HD two each solid state relay option kit, 60 Vpk 2.7A	$375.00
158781	MSI-8000HD two each solid state relay option kit, 200 Vpk 0.9A	$375.00
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000HD battery powered device	$165.00
149550	Universal 115/230 VAC 50/60 Hz (international plugs) battery charger for MSI-8000HD battery powered device	$160.00
171203	Audible alarm kit	$375.00
176963	Serial print cable (for GoDex printer)	$165.00
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 200Vpk, 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, 60Vpk solid state Form C relays	Consult
172501	Expanded relays option kit, eight-channel, 3A 60Vpk, solid state Form C relays	Consult
172502	Expanded relays option kit, eight-channel, 0.9A 200Vpk, solid state Form C relays	Consult
171676	Expanded relays option kit, eight-channel, 12A 5V, latching relays	Consult

MSI-8004HD

Indicator/RF LED Remote Display

8004
8004
8004
MSI-8004HD

Approvals

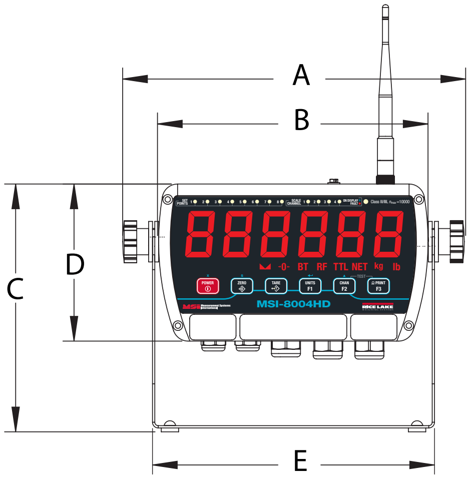
Measurement Canada Approved

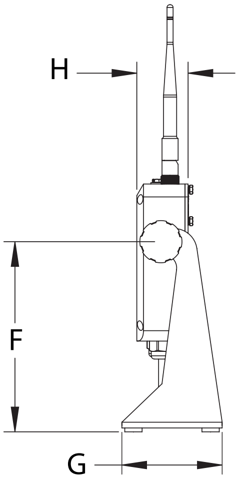
Part Number/Price

Part #	Description	Price
Indicator		
196904	4CH AC, red/green instant power-on, 85~264VAC, 47~440 Hz, 120~370 VDC	$2,400.00
178265	4CH AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	$2,170.00
178269	4CH DC 8-32 V, red/green, best for external 12 V SLA batteries	$2,205.00
178271	4CH DC 9-36 V Iso, red/green, do not use on 12 V Vehicle Systems	$2,310.00
183481	4CH 5 V Red/Green with external rechargeable battery	$2,185.00
Remote Display		
178281	AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	$2,120.00
178283	DC, 8-32 V, red/green best for external 12 V SLA battery	$2,075.00
178285	DC, 9-36 V Iso, red/green, do not use on 12 V vehicle systems	$2,160.00
183479	4CH 5 V red/green with external rechargeable battery	$1,875.00

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)





Standard Features

- LED display
- IP65 rugged milled aluminum enclosure
- 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

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:
Four 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, peak, kg, kN. lb, M, ton, setpoint, function LEDs

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 Range:
Operating: -4 °F to 140 °F (-40 °C to 60 °C)
Certified: 23 °F to 104 °F (-5 °C to 40 °C)

Rating/Material:
NEMA Type 4, IP65 milled anodized aluminum

Warranty:
One-year limited

Approvals:
NTEP 17-036
Measurement Canada AM-6068

Options/Accessories

Part #	Description	Price
139309	Antenna kit, long range omni-directional, 9 dBi with 3 m coax Intended for omni-directional mast mounting (up to 2" dia). Beam-width. Must be mounted vertically.	$510.00
139310	Antenna kit, corner reflector, 9 dBi with 3 m coax intended for directional wall or mast mounting (up to 2" dia). Beam-width: 75° Elevation, 65° azimuth.	$505.00
139311	Antenna kit, corner reflector, 12 dBi with 3 m coax intended for directional wall or mast mounting (up to 2" dia). Beam-width: 50° Elevation, 36° azimuth.	$535.00
139312	Antenna kit, YAGI, 15 dBi with 3 m coax highly directional wall or mast mounting (up to 2" dia). Beam-width: 30° elevation, 34° azimuth.	$415.00
139313	Antenna kit, vehicle mount, 5 dBi with 5 m coax omni-directional. Mounts in 3/4" hole.	$160.00
162178	Antenna extension kit, 6 ft	$490.00
197013	Antenna extension kit, 20 ft	$520.00
155173	Spare kit, tilt stand	$90.00
199105	Audible alarm not compatible with battery versions	Consult
22436	Cable, Comm DB9F 9-pin fem one end stripped and tinned on other end 6' in 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.	$70.00
183437	Battery, 5V Li-ion battery with USB power ports. Output 5 V/3.0A per port (6.0 A max)Rate, 2A per port (4A if both ports are used).	$235.00
184131	8004 option kit, WiFi with SMA antenna	$200.00
187424	8004 option kit, 2nd Xbee with TNC antenna	$210.00
182224	Power adapter, 12 VDC 5 VDC dual USB car charger plus 3 ft USB cable	$60.00
Relays		
172500	Expanded relays option kit, four-channel, 3A, 60VPK SSR form C	Consult
172501	Expanded relays option kit, eight-channel, 3A 60VPK, SSR form C	Consult
Consult	Expanded relays option kit, four-channel, 0.9A 200VPK, AC/DC SSR Form C	Consult
172502	Expanded relays option kit, eight-channel, 0.9A 200VPK, SSR form C	Consult
172492	Expanded relays option kit, four-channel, 12A 5 V, momentary	Consult
172495	Expanded relays option kit, eight-channel, 12A 5 V, momentary	Consult
172490	Expanded relays option kit, four-channel, 12A 5 V, latching relays	Consult
171676	Expanded relays option kit, eight-channel, 12A 5 V, latching relays	Consult

MSI Scoreboards Wireless RF

Featuring LaserLight2 Remote Displays

RICE LAKE
LASERLIGHT2
100000
GR
NT
lb
kg

Standard Features

- 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
- Tilt mounting bracket
- Integrated data repeater
- 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
- 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

(Contact MSI for application consultation)

Specifications

Enclosure:
NEMA Type 4, IP66

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

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

Radio Link:
Direct sequence spread spectrum at 2.4GHz

Radio Link Effective Range:
Typically 100 to 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

Part Number/Price

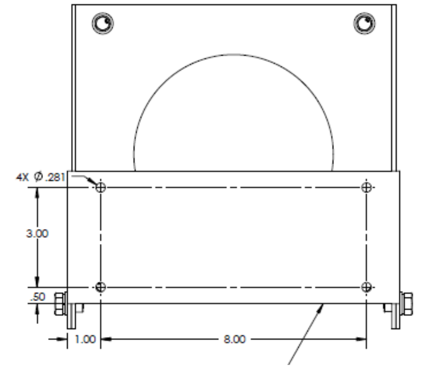
Part #	Description	Est. Weight	Price
178004	LaserLight2, 4 in with ScaleCore RF and tilt bracket		$2,535.00
178006	LaserLight2, 6 in with ScaleCore RF and tilt bracket		$3,005.00
178341	Laserlight2, 4 in with tilt bracket		$2,410.00
178342	Laserlight2, 6 in with tilt bracket		$2,870.00

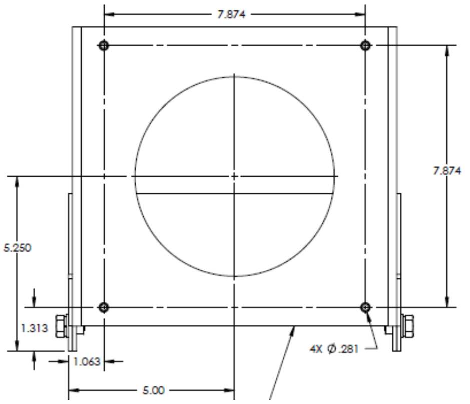
Options/Accessories

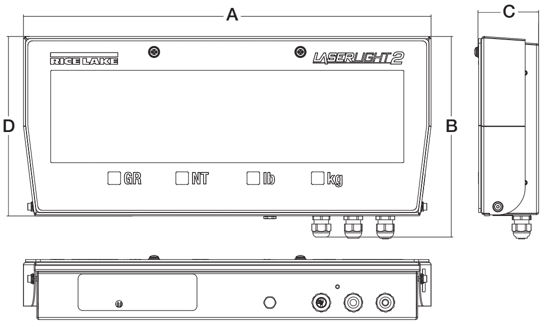
Part #	Description	Est. Weight	Price
139309	Long-range antenna, 300 m-500 m omni-directional with 9 dBi gain, includes 10 ft/3 m coaxial cable	1 lb	$510.00
139310	9 dBi gain corner reflector antenna	1 lb	$505.00
139311	12 dBi gain corner reflector antenna	1 lb	$535.00
139313	5 dBi gain vehicle/cab mount whip antenna	1 lb	$160.00
162178	Antenna extension kit, 6 ft		$490.00
197013	Antenna extension kit, 20 ft		$520.00
178318	Replacement tilt bracket, LaserLight2		$275.00

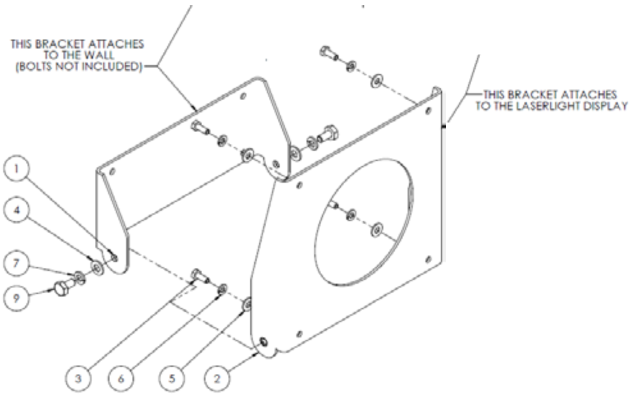
Dimensions

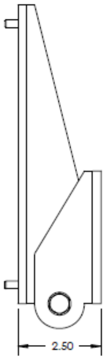
MSI Scoreboards Wireless RF							
22-inch enclosure (4-inch model)				**31-inch enclosure (6-inch model)**			
A	22.28 in (565 mm)	C	3.28 in (85 mm)	A	30.63 in (780 mm)	C	3.73 in (95 mm)
B	10.96 in (280 mm)	D	9.80 in (250 mm)	B	13.94 in (355 mm)	D	12.77 in (325 mm)








THIS BRACKET ATTACHES TO THE WALL (BOLTS NOT INCLUDED)
THIS BRACKET ATTACHES TO THE LASERLIGHT DISPLAY
1
4
7
9
3
6
5
2



TranSend™ MSI-7000

Wireless Load Cell Interface System

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC Power Input			
159207	Four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$1,055.00
161949	Four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,210.00
176648	Four-channel transmitter, no relays, Wi-Fi	2 lb	$1,115.00
176652	Four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,265.00
7-36 VDC Power Input			
159470	Four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$1,090.00
161951	Four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,265.00
176650	Four-channel transmitter, no relays, Wi-Fi	2 lb	$1,145.00
176653	Four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,325.00
85-265 VAC Power Input			
159469	Four-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$1,115.00
161950	Four-channel transmitter, includes three coil relays, RF 802.15.4, 2.4 GHz	2 lb	$1,295.00
176647	Four-channel transmitter, no relays, Wi-Fi	2 lb	$1,175.00
176651	Four-channel transmitter, includes three coil relays, Wi-Fi	2 lb	$1,370.00
Receivers			
5-6 VDC Power Input			
160016	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	$1,265.00
160017	MSI-7000 four-channel receiver to provide RS232 serial output	2 lb	$1,285.00
7-36 VDC Power Input			
159478	MSI-7000 four-channel receiver to provide RS232 serial output	2 lb	$1,340.00
159476	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	$1,425.00
85-265 VAC Power Input			
159477	Four-channel receiver to provide RS232 serial output	2 lb	$1,190.00
159475	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	$1,530.00

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 with all transmitters
- IP68 milled aluminum enclosure

(Contact MSI for application consultation)

Specifications

Power:
MSI-7000: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7001: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7000HD: 7-36 VDC, 9-36 VDC, 85-265 VAC
MSI-7001HD: 5-6 VDC, 7-36 VDC, 9-36 VDC, 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16 x 350 ohm or 32 x 700 ohm 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 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Full duplex RS-232

Circuit Protection:
RFI, EMI, ESD protection

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

Rating/Material:
MIS-7000/MSI-7001: IP68, die-cast aluminum encloser
MSI-7000HD/MSI-7001HD:
IP68, durable milled aluminum enclosure

Additional RF Options:
Wi-Fi
802.15.4
FHSS

Warranty:
One-year limited

Options/Accessories

Part #	Description	Price
162172	Charger, TranSend™ for 6 V SLA battery	$70.00
162173	Battery, TranSend 6 V SLA	$135.00
162175	Enclosure, TranSend for 6 V SLA battery	$350.00
160109	AC adapter, TranSend 6 V	$59.00
143531	Power cord, 6 V SLA battery charger EU	$31.00
143533	Power cord, 6 V SLA battery charger, Australia	$54.00
143534	Power cord, 6 V SLA battery charger, UK	$47.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$59.00
162178	Antenna extension kit, 6 ft coax cable	$490.00
139309	Antenna kit, long-range Omni with 3 m coax cable	$510.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$505.00
197013	Antenna extension kit, 20 ft	$520.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$535.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$415.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$480.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$160.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector	$200.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector	$180.00
145085	RS-232 serial cable, unterminated	$135.00

TranSend™ MSI-7001

Wireless Load Cell Interface System

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC Power Input			
160330	Single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$995.00
176655	Single-channel transmitter, no relays, Wi-Fi	2 lb	$1,050.00
7-36 VDC Power Input			
160329	Single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$1,055.00
176656	Single-channel transmitter, no relays, Wi-Fi	2 lb	$1,115.00
85-265 VAC Power Input			
160328	Single-channel transmitter, no relays, RF 802.15.4, 2.4 GHz	2 lb	$1,090.00
176654	Single-channel transmitter, no relays, Wi-Fi	2 lb	$1,145.00
Receivers			
5-6 VDC Power Input			
160337	Single-channel receiver to provide a mV signal to a digital weight indicator, RF 802.15.4, 2.4 GHz	2 lb	$1,055.00
160334	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	$1,115.00
161941	Single-channel receiver to provide RS232 serial output	2 lb	$825.00
7-36 VDC Power Input			
160336	Single-channel receiver to provide a mV signal to a digital weight indicator. RF 802.15.4, 2.4 GHz	2 lb	$1,155.00
161939	Single-channel receiver to provide RS232 serial output	2 lb	$940.00
160333	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	$1,265.00
85-265 VAC Power Input			
160335	Single-channel receiver to provide a mV signal to a digital weight indicator, RF 802.15.4, 2.4 GHz	2 lb	$1,210.00
161938	Receiver to provide RS232 serial output	2 lb	$1,005.00
160332	7001AN AC power	-	$1,325.00

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 with all transmitters
- IP68 milled aluminum enclosure

(Contact MSI for application consultation)

Specifications

Power:
MSI-7000: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7001: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7000HD: 7-36 VDC, 9-36 VDC, 85-265 VAC
MSI-7001HD: 5-6 VDC, 7-36 VDC, 9-36 VDC, 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16 x 350 ohm or 32 x 700 ohm 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 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Full duplex RS-232

Circuit Protection:
RFI, EMI, ESD protection

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

Rating/Material:
MIS-7000/MSI-7001: IP68, die-cast aluminum encloser
MSI-7000HD/MSI-7001HD:
IP68, durable milled aluminum enclosure

Additional RF Options:
Wi-Fi
802.15.4
FHSS

Warranty:
One-year limited

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	$135.00
164865	Cable, 4 m, one-channel, mV/V output, LC input	$145.00
165648	Cable, 5 m, one-channel, mV/V output, LC input	$165.00
165651	Cable, 10 m, one-channel, mV/V output, LC input	$230.00
162184	Load cell connector, TranSend, field wireable, 4-6 mm straight. For use with single channel transmitters and all receivers.	$62.00
162185	Load cell connector, TranSend, field wireable, 6-8 mm straight. For use with single channel transmitters and all receivers.	$62.00
162186	Load cell connector, TranSend, field wireable, 4-6 mm right angle. For use with single channel transmitters and all receivers.	$62.00
162187	Load cell connector, TranSend, field wireable, 6-8 mm right angle. For use with single channel transmitters and all receivers.	$62.00
145084	Cable, 2 m, one-channel, analog output	$64.00
144400	Cable, 5 m, one-channel, analog output	$100.00
168903	Cable, 10 m, one-channel, analog output	$150.00
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 6 V SLA battery	$70.00
162173	Battery, TranSend 6 V SLA	$135.00
162175	Enclosure, TranSend for 6 V SLA battery	$350.00
160109	AC adapter, TranSend 6 V	$59.00
143531	Power cord, 6 V SLA battery charger EU	$31.00
143533	Power cord, 6 V SLA battery charger, Australia	$54.00
143534	Power cord, 6 V SLA battery charger, UK	$47.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$59.00
162178	Antenna extension kit, 6 ft coax cable	$490.00
139309	Antenna kit, long-range omni with 3 m coax cable	$510.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$505.00
197013	Antenna extension kit, 20 ft	$520.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$535.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$415.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$480.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$160.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector	$200.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector	$180.00
145085	RS-232 serial cable, unterminated	$135.00

TranSend™ MSI-7000HD

Wireless Load Cell Interface System

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
7-36 VDC Power Input			
177944	Four-channel 7-36VDC, three coil relays, 802.15.4		$2,225.00
177997	Four-channel 7-36VDC, three coil relays, Wi-Fi		$2,235.00
9-36 VDC Power Input			
177945	Four-channel 9-36VDC isolated, three coil relays, 802.15.4		$2,320.00
177998	Four-channel 9-36VDC isolated, three coil relays, Wi-Fi		$2,345.00
85-265 VAC Power Input			
177942	Four-channel 85-265VAC, three coil relays, 802.15.4		$2,280.00
177995	Four-channel 85-265VAC, three coil relays, Wi-Fi		$2,300.00

Options/Accessories

Part #	Description	Price
187424	Dual XBee option kit for 7000HD with TNC antenna	$210.00
162178	Antenna extension kit, 6 ft coax cable	$490.00
139309	Antenna kit, long range Omni with 3 m coax cable	$510.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$505.00
197013	Antenna extension kit, 20 ft	$520.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$535.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$415.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$480.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$160.00
148624	RS-232/RS-485 serial cable	$140.00
143348	Cordset IP68 5-pin male	$135.00
141263	12V Battery Half Plate, requires separate power cable	$1,550.00

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 with all transmitters
- IP68 milled aluminum enclosure

(Contact MSI for application consultation)

Specifications

Power:
MSI-7000: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7001: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7000HD: 7-36 VDC, 9-36 VDC, 85-265 VAC
MSI-7001HD: 5-6 VDC, 7-36 VDC, 9-36 VDC, 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16 x 350 ohm or 32 x 700 ohm 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 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Full duplex RS-232

Circuit Protection:
RFI, EMI, ESD protection

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

Rating/Material:
MIS-7000/MSI-7001: IP68, die-cast aluminum encloser
MSI-7000HD/MSI-7001HD:
IP68, durable milled aluminum enclosure

Additional RF Options:
Wi-Fi
802.15.4
FHSS

Warranty:
One-year limited

TranSend™ MSI-7001HD

Wireless Load Cell Interface System

MSI-7001HD
RICE LAKE

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
5-6 VDC			
178010	Two-channel 5-6VDC, 802.15.4		$1,240.00
178018	Two-channel 5-6VDC, Wi-Fi		$1,340.00
7-36 VDC			
178011	Two-channel 7-36VDC, 802.15.4		$1,325.00
178019	Two-channel 7-36VDC, Wi-Fi		$1,350.00
9-36 VAC Isolated			
178012	Two-channel 9-36VDC isolated, 802.15.4		$1,340.00
178020	Two-channel 9-36VDC isolated, Wi-Fi		$1,425.00
85-265 VAC			
178021	Two-channel 85-265VAC, 802.15.4		$1,370.00
178017	Two-channel 85-265VAC, W-iFi		$1,400.00

Options/Accessories

Part #	Description	Price
162172	Charger, TranSend™ for 6 V SLA battery	$70.00
162173	Battery, TranSend 6 V SLA	$135.00
162175	Enclosure, TranSend for 6 V SLA battery	$350.00
160109	AC adapter, TranSend 6 V	$59.00
143531	Power cord, 6 V SLA battery charger EU	$31.00
143533	Power cord, 6 V SLA battery charger, Australia	$54.00
143534	Power cord, 6 V SLA battery charger, UK	$47.00
160110	265 VAC to 6 VDC wall adapter US/UK/EU/AUS/China	$59.00
162178	Antenna extension kit, 6 ft coax cable	$490.00
139309	Antenna kit, long range Omni with 3 m coax cable	$510.00
139310	Antenna kit, corner reflector 9 dbi with 3 m coax cable	$505.00
197013	Antenna extension kit, 20 ft	$520.00
139311	Antenna kit, corner reflector 12 dbi with 3 m coax cable	$535.00
139312	Antenna kit, Yagi 15 dbi with 3 m coax cable	$415.00
144345	30 m coaxial cable, for use with non-vehicle mount antenna kits	$480.00
139313	Antenna kit, vehicle mount. 5 dbi with 5 m coaxial cable	$160.00
148624	RS-232/RS-485 serial cable	$140.00
143348	Cordset IP68, 5-pin	$135.00

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 with all transmitters
- IP68 milled aluminum enclosure

(Contact MSI for application consultation)

Specifications

Power:
MSI-7000: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7001: 5-6 VDC, 7-36 VDC, 85-265 VAC
MSI-7000HD: 7-36 VDC, 9-36 VDC, 85-265 VAC
MSI-7001HD: 5-6 VDC, 7-36 VDC, 9-36 VDC, 85-265 VAC

Excitation Voltage:
Transmitter: +4.8 VDC, 16 x 350 ohm or 32 x 700 ohm 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 to 300 ft, line of sight; for longer range consult factory

Communication Ports:
Full duplex RS-232

Circuit Protection:
RFI, EMI, ESD protection

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

Rating/Material:
MIS-7000/MSI-7001: IP68, die-cast aluminum encloser
MSI-7000HD/MSI-7001HD: IP68, durable milled aluminum enclosure

Additional RF Options:
Wi-Fi
802.15.4
FHSS

Warranty:
One-year limited

ScaleCore Webserver

Wireless Network Router/Webserver

Approvals

Part Number/Price

Part #	Description	Price
207943	ScaleCore Webserver, 5 VDC and PoE	$3,820.00
209704	ScaleCore Webserver, 7-14 VDC and PoE	$3,820.00
210817	ScaleCore Webserver, 85-265 VAC and PoE wall cube	$3,820.00

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)	$1,560.00

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

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 module

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

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

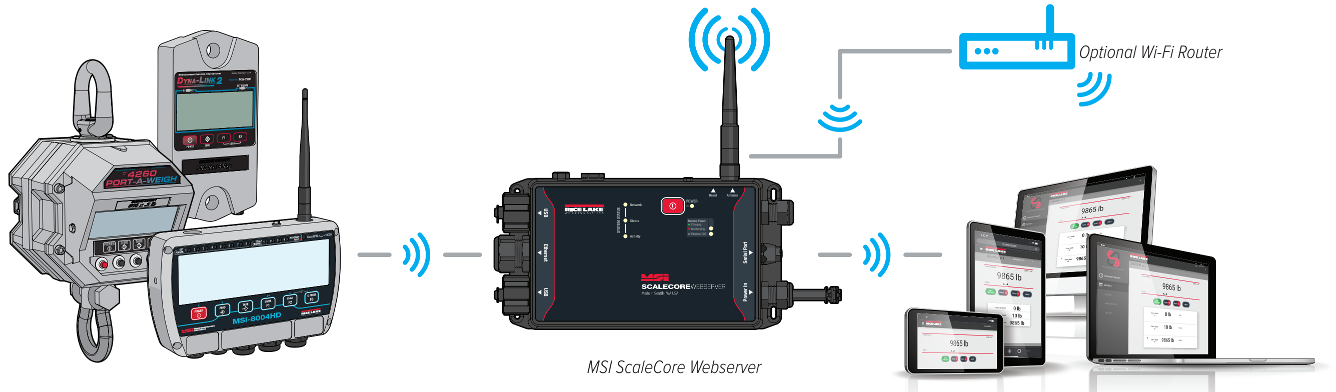
Effective Range:
Typically 100 to 300 ft, line of sight; for longer range consult factory

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

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

Warranty:
One year limited

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



MSI ScaleCore Webserver

MSI ScaleCore and WiFi enabled device

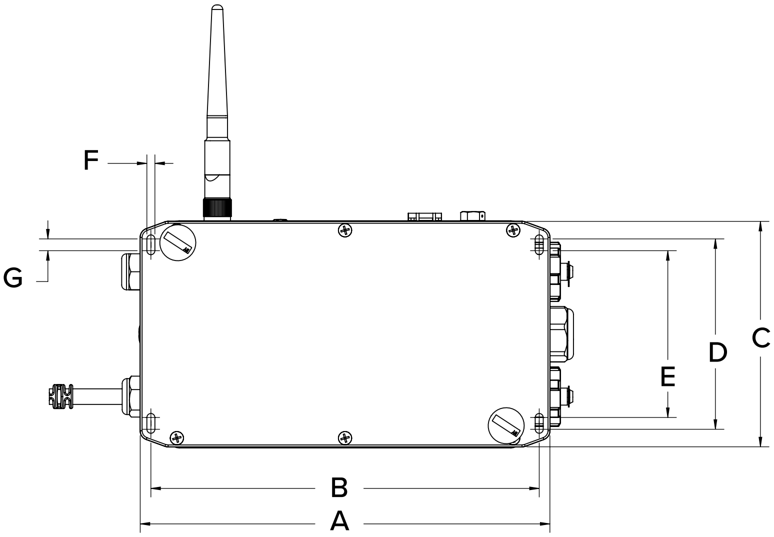
Display multiple ScaleCore devices using a web browser

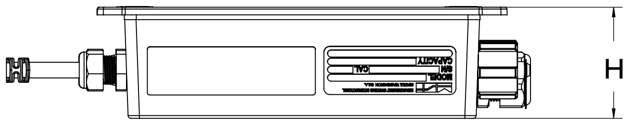
ScaleCore Webserver

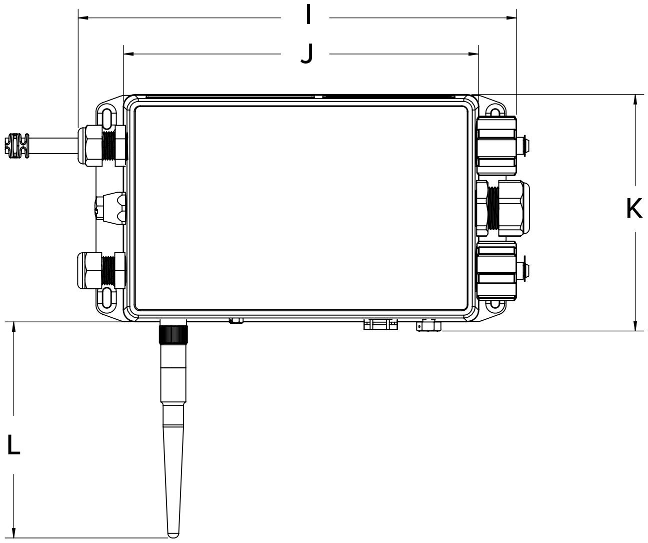
Wireless Network Router/Webserver

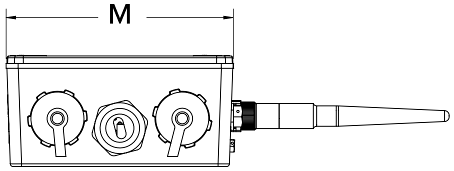
Dimensions

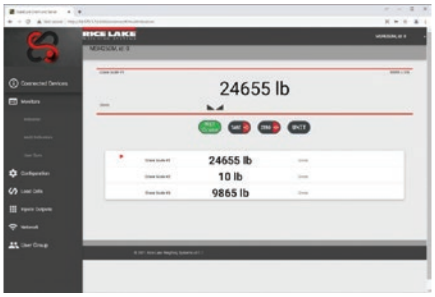
ScaleCore Webserver			
A	8.54 in (217 mm)	H	2.23 in (57 mm)
B	8.09 in (205 mm)	I	9.13 in (232 mm)
C	4.70 in (119 mm)	J	7.40 in (188 mm)
D	3.97 in (101 mm)	K	4.90 in (124 mm)
E	3.47 in (88 mm)	L	4.50 in (114 mm)
F	0.17 in (4 mm)	M	4.70 in (119 mm)
G	0.25 in (6 mm)		










RICE LAKE
Connected Devices
Monitors
Configuration
Load Cells
Inputs Outputs
Network
User Group
TARE
ZERO
UNIT

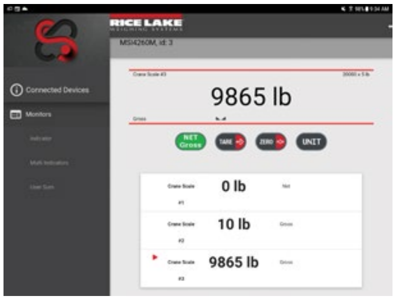
24655 lb

24655 lb

10 lb

9865 lb

Computer Screenshot


RICE LAKE
WEIGHING SYSTEMS
Connected Devices
Monitors
NET
Gross
TARE
ZERO
UNIT

MSI4260M, id: 3

9865 lb

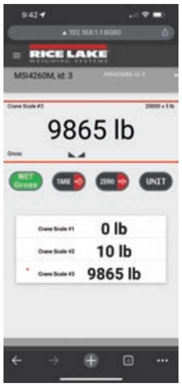
Gross

Crane Scale #1 0 lb Net

Crane Scale #2 10 lb Gross

Crane Scale #3 9865 lb Gross

Tablet Screenshot


9:42
RICE LAKE
WEIGHING SYSTEMS
NET
Gross
TARE
ZERO
UNIT

MSI4260M, id: 3

9865 lb

Gross

Crane Scale #1 0 lb

Crane Scale #2 10 lb

Crane Scale #3 9865 lb

Phone Screenshot

Rugged Remote

PAIRED
POWER
ZERO
→0
TARE/F1
FCN/F2
MSI
RF REMOTE
Seattle, WA USA 2.4GHz
RICE LAKE

Approvals

CE

Part Number/Price

Part #	Description	Price
173014	MSI Rugged Remote control	$355.00

Standard Features

- Handheld
- 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
- Four button interface: Power, Zero, Tare, Function

Options

(Contact MSI for application consultation)

- CE approved version available, consult for more information

Specifications

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

Function:
Power: turns unit ON or 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

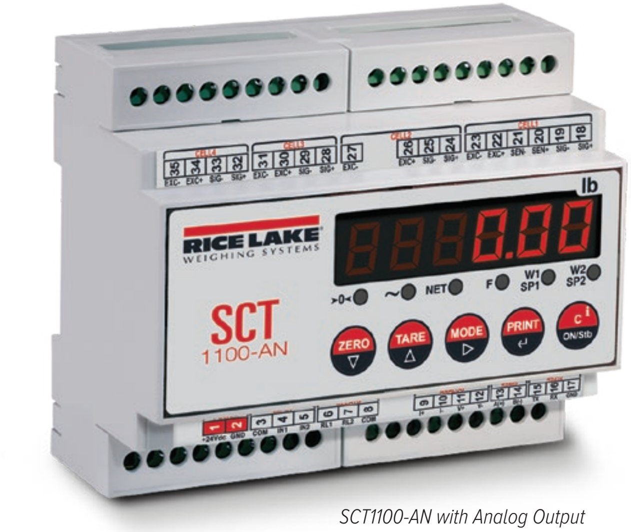
Radio Effective Range:
Typically 100-300 ft line of sight

Warranty:
One-year limited

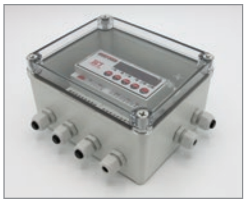
Approval:
CE Marked versions available

SCT-1100

Signal Conditioning Transmitter



SCT1100-AN with Analog Output



SCT-1100-AN in Plastic Enclosure

Approvals

Measurement Canada Approved

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 pre-settable 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 RU 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	$510.00
197011	Indicator, SCT-1100-AN four load cell input with Analog Output in plastic enclosure	1 lb	$645.00

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	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
1000ETHERNET
RICE LAKE
ETHERNET

SCT-1000
Serial to Ethernet converter

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 5 VDC, 0 to 10 VDC (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 Canada AM-6165C
OIML R76/2006-A-GB1-19.17
UKCA Marked
cULus Listed

SCT-2200

Signal Conditioning Transmitter

SCT2200 Pictured with optional EtherNet/IP Module

Approvals

Measurement Canada Approved

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
- DIN rail mountable
- Calibration using linearization points
- Reading of the net, gross and tare weights, clearing, semi-automatic and presettable tare setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, simulation of key pressure, Modbus RTU or ASCII protocol
- Two RS-485 port for "daisy-chain" network connection
- 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	$355.00
202104 *	Indicator, SCT-2200-AN with analog output	1 lb	$485.00
Fieldbus			
182592	Fieldbus, SCT-2200, Profinet module	1 lb	$595.00
194343	Fieldbus, SCT-2200, Ethernet TCP/IP and Wi-Fi	1 lb	$595.00
182593	Fieldbus, SCT-2200, Profibus module	1 lb	$385.00
182591	Fieldbus, SCT-2200, EtherNet/IP module	1 lb	$595.00
182596	Fieldbus, SCT-2200, DeviceNet module	1 lb	$595.00
182598	Fieldbus, SCT-2200, EtherCAT module	1 lb	$590.00
182597	Fieldbus, SCT-2200, CANopen module	1 lb	$590.00
196694	Fieldbus, SCT-2200, Modbus TCP module	1 lb	$595.00
182599	Cable with RJ45 plugs, 6 in length	1 lb	$12.00
212772 **	Fieldbus, SCT-2200, Profibus module	1 lb	$385.00

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	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:
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 & 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

Rating/Material:
NEMA Type 1 plastic pluggable connectors

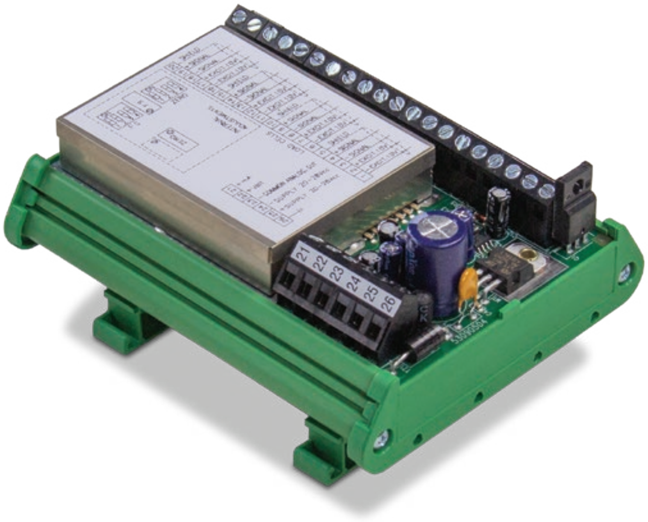
Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

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

SCT-3300

Signal Conditioning Transmitter



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	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

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 & Humidity:
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

SCT-1SX

High-Speed Transmitter with Integrated Fieldbus and Webserver

NEW

485
OUTPUT
INPUT
PWR
SCT-1SX-AN
WEIGHT TRANSMITTER
RICE LAKE
CAL
ANALOG
LOAD CELL

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 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

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 DIO 2 IN and 4 OUT, integrated web server		$895.00
216822	SCT-1SX-ETHIP weight transmitter and EtherNet/IP port for DIN rail mount with DIO 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 DIO 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 DIO 2 IN and 4 OUT, integrated web server		$1,295.00

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
Consult	PC software, XSpeed with graphical weighing analysis and oscilloscope function for system diagnostics and filter optimization		Consult
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, 5W

Power Consumption:
70 mA min to 100 mA max

Excitation Voltage:
5V, 120 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: 12/24 VDC
Four outputs, configurable: 150 mA 48 VAC/
150 mA 60 VDC

Communication Ports:
(1) RS-485, (1) RS-232
1 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 20mA, 4 to 20mA (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 0.90 x 4.00 in
(120 x 23 x 112 mm)

Temperature & Humidity:
For internal use -20°C to 60°C
Approved -10°C to 40°C
Humidity: 85% non-condensing

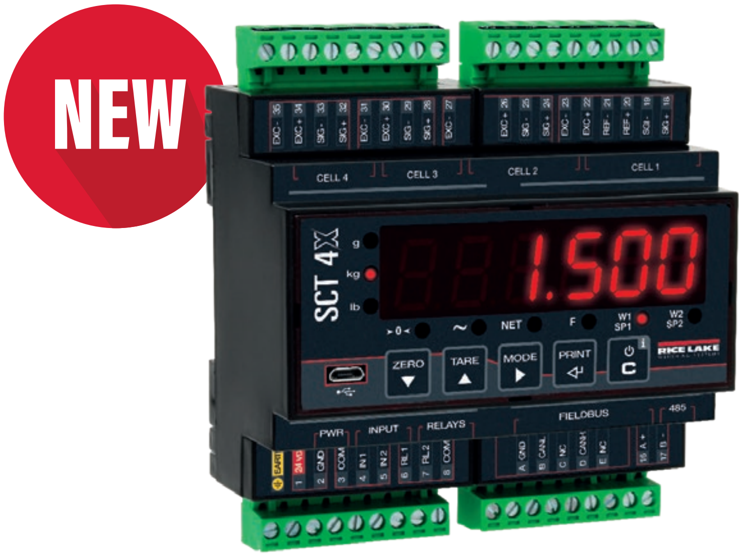
Rating/Material:
Enclosure: ABS plastic

Warranty:
One-year limited

Approvals:
CE-M EN 45501

SCT-4X

4-Channel Integrated Fieldbus Transmitter



Standard Features

- Manage up to 4-load cells (1 scale) or 4 scales with load cell feed circuit for greater weighing stability
- Process to 2600 weight readings per second for single-channel
- 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
- Integrated web server allows complete diagnostics, calibration and remote configuration
- 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

Part Number/Price

Part #	Description	Est. Weight	Price
216824	SCT-4XAN high speed weight transmitter and analog output for DIN rail mount with 2 IN, 2 OUT, keypad, LED display		$940.00
216825	SCT-4X-ETHIP high speed 4 channel weight transmitter and EtherNet/IP port for DIN rail mount with DIO 2 IN, 2 OUT, 5-key keypad, LED display		$1,195.00
216826	SCT-4X-MODTCP high speed 4 channel weight transmitter and Modbus/TCP port for DIN rail mount with DIO 2 IN, 2 OUT, 5-key keypad, LED display		$1,195.00
216827	SCT-4X-PRONET high speed 4 channel weight transmitter and PROFINET port for DIN rail mount with DIO 2 IN, 2 OUT, 5-key keypad, LED display		$1,125.00

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
Consult	PC software, XSpeed with graphical weighing analysis and oscilloscope function for system diagnostics and filter optimization		Consult
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:
5W

Excitation Voltage:
5 VDC, 120 mA
up to 16 x 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 2600 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):
Opt. isolated, 16-bit
0-20mA, 4-20mA (Maximum 350 ohm)
0-5 VDC, 0-10 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 x 2.20 x 4.64 inches
(106 x 56 x 118 mm)

Temperature & Humidity:
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

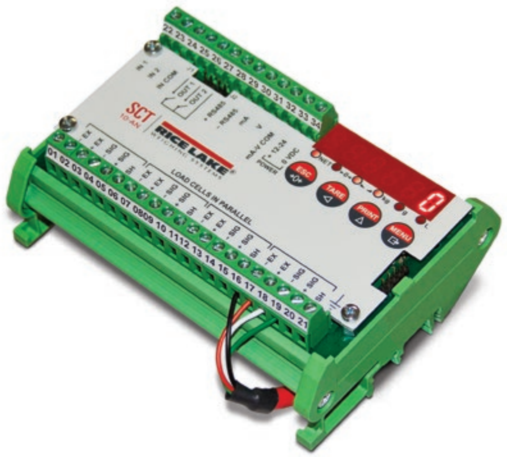
Weight:
1 lb (0.5 kg)

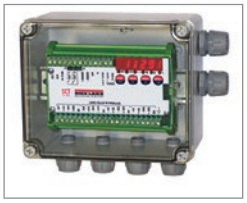
Warranty:
One-year limited

Approvals:
CE-M EN 45501

SCT-10

Signal Conditioning Transmitter





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	$530.00
129394	SCT-10 converter with Analog Output in enclosure	1 lb	$675.00

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
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 5-24VDC, 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 10k ohm)

Annunciators:
Net, center of zero, stability,
KG, G, LB

Display:
0.3 in (8 mm), six-digit, 7 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

SCT-20

Signal Conditioning Transmitter

OUT1
OUT2
OUT3
OUT COM
+RS485
-RS485
+12-24
0 VDC
RS485 Termination
-EX
+EX
+REF
-REF
-SIG
+SIG
IN1
IN2
IN COM
mA
V
mA-V COM
SCT 20-AN
RICE LAKE WEIGHING SYSTEMS

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	$530.00
129397	SCT-20 converter with DeviceNet™	1 lb	$675.00
129558	SCT-20 converter with Profibus™ DP	1 lb	$735.00
129398	SCT-20 converter with EtherNet/IP™	1 lb	$950.00
132534	SCT-20 converter with Ethernet TCP/IP™	1 lb	$950.00
156903	SCT-20 converter with Modbus/TCP	1 lb	$950.00
131128	Installation manual	1 lb	$25.00
162887	SCT-20 converter with Ethernet TCP/IP	1 lb	$995.00

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 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 10k 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 & Up Navigation, Enter

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

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

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

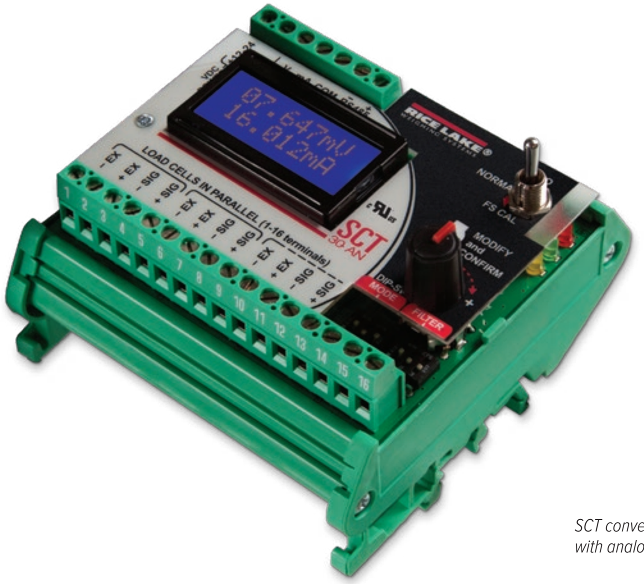
Weight:
1 lb (0.5 kg)

Warranty:
One-year limited

Approvals:
NTEP CC 14-083
cULus Recognized

SCT-30

Signal Conditioning Transmitter



SCT converter
with analog output

Approvals

cULus

Part Number/Price

Part #	Description	Est. Weight	Price
156794	SCT-30 converter with Analog Output	1 lb	$430.00
156834	SCT-30 converter with Analog Output in enclosure	1 lb	$595.00

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
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 10k 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 & Humidity:
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

SCT-40

Signal Conditioning Transmitter

326.5
kg
TEST
ESC
TARE
PRINT
MENU
SCT
40-MB
Modbus/TCP
RICE LAKE
WEIGHING SYSTEMS
LOAD CELLS

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	$735.00
170471	SCT-40 with DeviceNet	1 lb	$980.00
170472	SCT-40 with Profibus	1 lb	$980.00
170473	SCT-40 with EtherNet/IP	1 lb	$1,025.00
170474	SCT-40 with Ethernet TCP/IP	1 lb	$975.00
170475	SCT-40 with Modbus TCP	1 lb	$1,025.00
170476	SCT-40 with Profinet I/O	1 lb	$1,025.00
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 to 24 VDC

Power Consumption:
5W

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 10,000 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 & Humidity:
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

Ranger 7

Variable Range Simulator

+SIG
–SIG
+EXC
–EXC
RANGER 7
High Resolution Load Cell Simulator
RICE LAKE
OFFSET
VARIABLE
X4
X.5
X1
0.5mV/V
0.1mV/V
0.01mV/V

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	$995.00

Options/Accessories

Part #	Description	Price
21116	Cable (4 ft) with banana plugs	$68.00

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