SensX® Series
EXTREME

SensThys®
Sense This World

The new SensX EXTREME rugged reader is SensThys' highest performance RFID reader enclosed in the industry's highest rated IP67 industrial and weather-tight chassis for harsh environments. Operators can now install RFID reader networks in places where traditional readers have previously not been suited.

In addition to RFID, SensX includes multiple sensors, including Bluetooth, WiFi, gyroscope, 3-axis accelerometer, barometer, and GPS. Finally a complete Linux subsystem supports local tag processing and business intelligence.
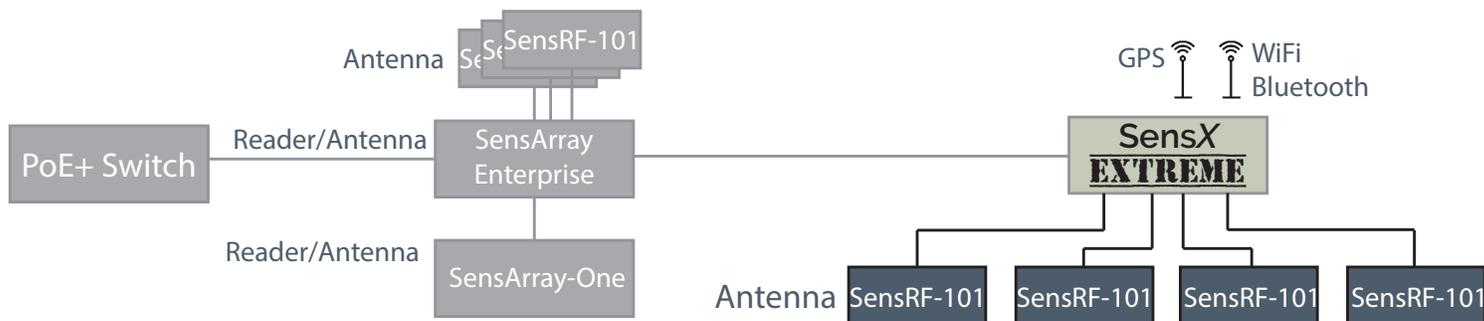
-40°C TO 55°C
TEMPERATURE

RAIN RFID | BLE BEACONS | GYROSCOPE | GPS | 3-AXIS ACCEL | PRESSURE
SENSORS

WiFi | CLASS 4 POE | BLUETOOTH
CONNECTIVITY

EXAMPLE OF SENSX EXTREME IN A NETWORK WITH SENSARRAY AND SENSRF ANTENNAS

Key Features	How?
Deployment Flexibility in ANY commercial or industrial location	IP67 -rated weather-tight enclosure
	Rugged IP67 water and dust proof connectors
	Integrated heat-sink supports extended operating range
Highest Reader Performance	+33 dBm - highest transmit power reader in the market
	Industry leading unique-tag read-rates
	Drives up to 4 external antennas
Multiple Wired and Wireless I/O and Internal Sensors	WiFi (802.11 a/b/g/n/ac)
	Bluetooth BT4.1 (BR+EDR+BLE) e.g. BT beacons or BT tags
	GPS for location and altitude
	Gyroscope, accelerometer, barometric pressure sensors
Complete weather-tight RFID Reader network	Supports IP68-rated SensRF-101 (9 dBic) (not supplied)

Power and Interfaces Specifications

Feature	Specification
Ethernet - Data and Power	TCP/IP; Rugged IP67 (RJ-45) accepting Class 4 PoE
Antenna RF	+33 dBm max; Rugged IP67 4 x RP-TNC with cap and chain
WiFi and Bluetooth	802.11a/b/g/n/ac (2.4 and 5 GHz), Bluetooth 4.1 (BR+EDR+BLE) ; Rugged IP67 RP-SMA with cap and chain (antenna not included)
GPS	GNSS; Rugged IP67 SMA with cap and chain (active antenna not included)
GPIO	2 input, 2 output; Rugged IP67 6-pin circular male pin connector with dust cap
USB	USB 2.0 Host; Rugged IP67 Mini-USB with dust cap

Reader and RF Specifications

Feature	Specification
Reader Architecture	M-Power
Reader Protocol	EPC Class 1 Gen 2v2 and 18000 – 6C/63
Operating Frequency	902.75 MHz – 927.25 MHz
Hopping Channels	50
Channel Spacing	500 KHz
Channel Dwell Time	< 0.4 seconds
RF Transmitter	< 30 dBm
Modulation Methods	PR-ASK, DB-ASK
20 db Modulation Bandwidth	< 100 KHz

Physical and Environmental Specifications

Feature	Specification
Dimensions (l - w -h) including interfaces	(mm) 240 x 125 x 55 · (in) 9.4 x 4.9 x 2.1
Weight, including interfaces	Approximately 1120 g (2.46 ibs)
Operating Environment	-40˚C to 50˚C, 100% humidity
Compliance Certifications	IP67-rating (enclosure)

Software

Feature	Specification
User Interface	SensThys RFID Console
SDKs	VB.Net, C# and Java

Specifications subject to change without notice.

ORDERING INFORMATION - Order at https://www.sensthys.com/shop/

Model	Region	Part Number
SensX Extreme Rugged Reader	North America	**SX11480F**
	Europe	**SX11480E**
	Australia	**SX11480Au**
	China	**SX11480C**

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