

SensX[®] EXTREME

An EPIC Native reader



The 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. **Tested to MIL-810 specifications and HERO certified**, this reader is ideal for use outside in the most extreme conditions ... **without** a NEMA enclosure.

This is an **EPIC native reader** which offers:

- Guaranteed Data
- Infinite Tag Life

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



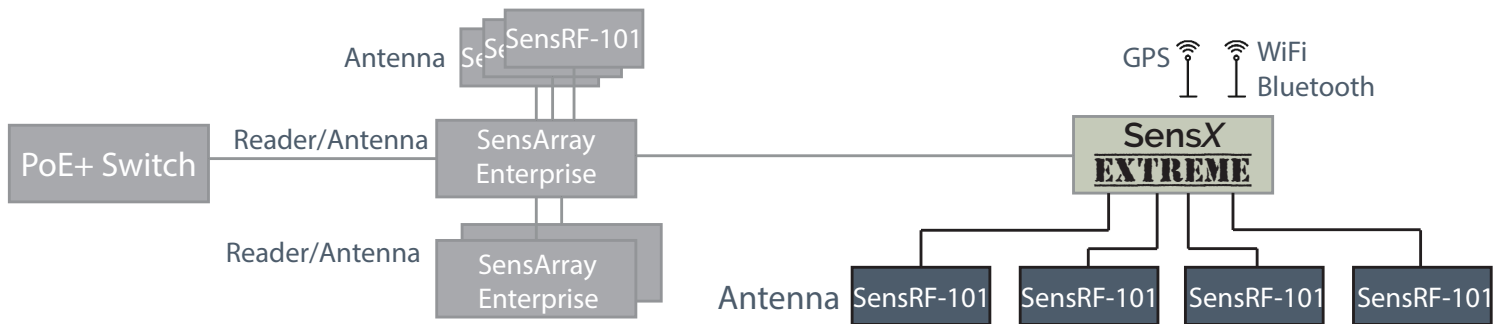
CLASS 4 POE



BLUETOOTH

CONNECTIVITY

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



Key Features	How?
Absolutely guarantee data from your RFID system: Never see bad data from your tags. Never see phantom/ghost tags. Extend the lifetime of your tags	EPIC tags are natively decoded by this reader. This reader supports both Level 2 and Level 4 EPIC decoding. Fixes data corrupted in the tags memory AND during transmission.
Deployment Flexibility in ANY commercial or industrial location	IP67, MIL-810, HERO 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
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

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 FCC	ETSI (if different)
Reader Architecture	M-Power	
Reader Protocol	EPC Class 1 Gen 2v2 and 18000 – 6C/63	
Operating Frequency	902.75 MHz – 927.25 MHz	865-868 MHz
Hopping Channels	50	4
Channel Spacing	500 KHz	600KHz
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 lbs)
Operating Environment	-40°C to 50°C, 100% humidity
Compliance Certifications	IP67-rating (enclosure)

Software - <https://www.sensthys.com/downloads/>

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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