



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



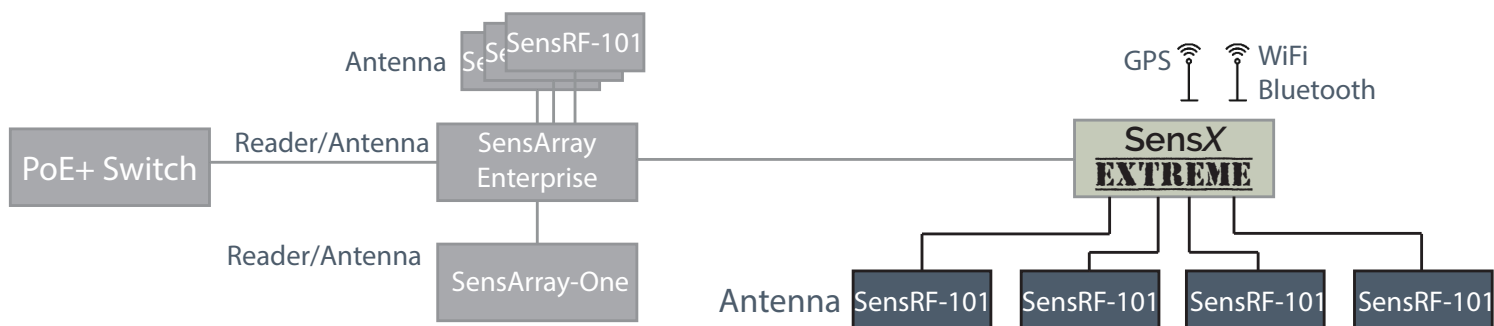
CLASS 4 POE



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 | Impinj R2000 Platform |
| Reader Protocol | EPC Class 1 Gen 2 and 18000 – 6C |
| 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 lbs) |
| 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.sensthus.com/shop/>

| Model | Region | Part Number |
|-----------------------------|---------------|-------------|
| SensX Extreme Rugged Reader | North America | SX11480F |
| | Europe | SX11480E |

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