SensArray® *Core*

An EPIC Native Reader

SensThys®
Sense This World

The 4th generation SensArray *Core* is an **EPIC native** RAIN RFID **reader** incorporating an internal 8.5dBic **antenna**, 3 additional antenna ports (allowing **4 antenna systems**) and a **4 in/4-out 30W powered (optically isolated) GPIO** subsystem. These features are combined into a svlete, attractive 10" x 10" form factor for use in high-end doctors offices to warehouses where minimizing protruding objects is important.



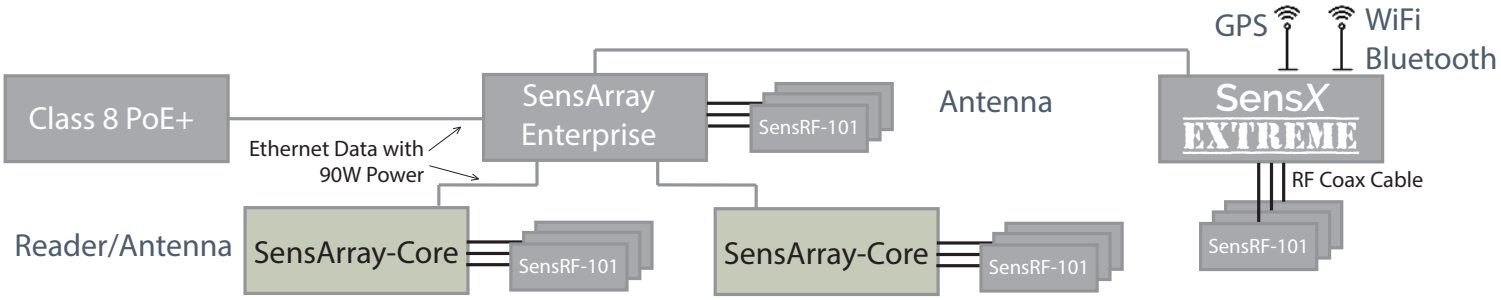
The SensArray *Core* operates at a full industry maximum of 33dBm via the a 30W or 90W capable **PoE+** input, so no separate DC power input is required.

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

- Guaranteed Data
- Infinite Tag Life.

EPIC™
Always Right

The reader is supplied as a flat/through-hole mount with a separate VESA 100mm studded bracket available (allowing mounting to a standard VESA mount). Variants for international regions are available. Call or visit our website for the latest.



Benefit?	How?	What Does This Mean For Me?
Absolutely guarantee data from your RFID system	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.	**Never** see bad data from your tags. **Never** see phantom/ghost tags. **Extend** the lifetime of your tags
Highest Reader Performance	+33 dBm transmit power, highest allowed in the market	More reliable read performance means less errors and faster results - much more efficient operation!
	Integrated antenna (8.5 dBic) plus up to 3 additional antenna ports	
Building and Community - friendly form factor	Neutral colored, Slim form-factor only 21mm/0.8" thick. Color and silk screening is customizable. Matches SensRF-101 antenna form-factor and neutral color.	Seamless addition to work environment.
Minimizes Installation Cost	Integrated 8.5dBic antenna	Less infrastructure to purchase and install. No performance compromises even with PoE power.
	Integrated PoE compatible with Class 4 or Class 8 PoE supplies	
	Off-the-shelf cabling (CAT5/6) provides both power and data	
Absolute simplicity	Integrated antenna, reader and single cable connectivity	Zero complexity. Single cable power and data. Readers tell *you* they're on the network.
	Reader pushes out a heart-beat for self-discovery	
Upgradeable	Swap between any other SensArray or SensX product.	Flexibility to grow or fix initial assumption mistakes (same software).
	Software compatibility across all SensThys products	

Power and Data Specifications

Parameter	Specification
Data Interface	TCP/IP (RJ-45), 1 port
POE+ (Class 4-8)	PD on Port 0 (30W-90W input)
	PoE+ injector, PN SPOE29WC4
Software Support	APIs (C#, VB.NET, Java), DLL, sample code, RFID Console
Power Consumption (33dBm, Idle)	13W, 3W

RF Specifications

Parameter	FCC	ETSI
Reader Architecture	M-Power	
Reader Protocol	EPC Class 1 Gen 2v2 and 18000 – 6C/63	
Operating Frequency	902MHz – 928 MHz	865.6 - 867.6 MHz
Hopping Channels	50	4
Channel Spacing	500 KHz	600 KHz
Channel Dwell Time	< 0.4 seconds	
RF Transmitter Power	< +33 dBm	
Modulation Methods	PR-ASK, DB-ASK	
20 db Modulation Bandwidth	< 100 KHz	
Internal Antenna	8.5 dBic, right-hand circular	

Physical and Environmental Specifications

PARAMETER	Specification
Dimensions	(cm) 25.4 x 25.4 x 2.0 • (in) 10 x 10 x 0.8
Weight	Approximately 0.79 kg (1.73 lbs)
Operating Temperature	0C to +50C (for 20% average duty cycle)
Maximum Duty Cycle (30dBm)	50% at 35C, 30% at 45C, 20% at 50C
Operating Environment	0 to 50C, non-condensing
Compliance Certifications	FCC Part 15; FCCID: TBD
	IC: TBD
	ETSI: TBD
	Safety tested to unified 60950-1 (CB Report)

Specifications are subject to change without notice.

ORDERING INFORMATION

Model	Region	Flat Mount SKU	VESA Mounting
SensArray-Core	North America	SO21330-FR	Add VESA Mount Bracket Model # SAA1
	Europe	SO21330-ER	
	Other regions available		

SensThys, Inc · 21060 Homestead Road · Suite 226 · Cupertino · CA 95014 · www.sensthys.com

Copyright® 2021 SensThys, Inc. All rights reserved.
SensThys, SensArray and SensRF are trademarks or registered trademarks of SensThys, Inc in the U.S. and other countries.

2021-11-04