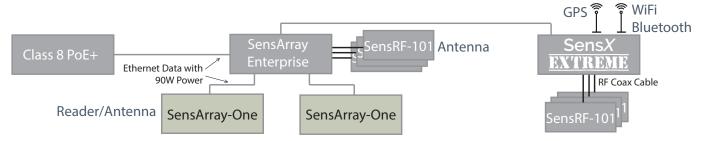
SensArray® One





The SensArray® One combines one of the strongest, fastest UHF passive RFID readers with an integrated 8.5dBic antenna in a svelte attractive 10" x 10" form-factor. The reader operates at a full industry maximum RF power via PoE input, so no separate DC power input is required.

The SensArray-One is ideal for tag commissioning or other low-cost applications. Conceptually it looks like a networked antenna ... an antenna with an inexpensive ethernet cable as an input!



Benefit?	How?	What Does This Mean for Me?	
Uncompromising Performance	RFID power and antenna optimized for full legal power delivery	See all tags! Uncompromising	
	Optimized RFID core - extreme tag read-rates / time to last tag	read distance and read-rates!	
Minimizes Installation Cost	Integrated 8.5dBic antenna	Less infrastructure to purchase	
	Integrated PoE compatible with Class 4 or Class 8 PoE supplies	and install. No performance compromises even with PoE power.	
	Off-the-shelf cabling (CAT5/6) provides both power and data	promises even with or power.	
Absolute simplicity	Integrated antenna, reader and single cable connectivity	Zero complexity. SIngle cable power and data. Readers tell <i>you</i> they're on the network.	
	Reader pushes out a heart-beat for self-discovery		
Inconspicuous and Blends In	Slim form-factor only 21mm/0.8" thick	Can use in commercial buildings.	
Upgradeable	Swap between any other SensArray or SensX product.	Flexibility to grow or fix initial	
	Software compatibility across all SensThys products	assumption mistakes (same software).	

MORE VARIANTS TO SELECT FROM

The SensArray-One is great for smaller applications such as commissioning. However, what happens if you want more than one reader, or antenna or to connect devices such as light-stacks, movement sensors etc. No problem - take a look at the SensArray-Pro or SensArray-Enterprise products.

Name	Readers/Chain	Antenna/Chain	РоЕ	Ethernet Data	GPIO	Antenna Ports	DC input
SensArray One	None	None	1	1 x RJ-45	None	None	No
SensArray Pro	5	20	3 (Class 4 - 30 W)	3 x RJ-45	4 in, 4 out, 15 W	3 x RP-SMA	Yes
SensArray Enterprise	25	100	4 (Class 8 - 90 W)	4 x RJ-45	4 in, 4 out, 30 W	3 x RP-SMA	No



Power and Data Specifications

Parameter	Specification	
Data Interface	TCP/IP (RJ-45), 1 port	
POE+ (Class 4-8)	PD on Port o (30W-90W input)	
	PoE+ injector, PN SPOE29WC4	
Software Support	APIs (C#, VB.NET, Java), DLL, sample code, RFID Console	
Power Consumption (33dBm, Idle) (TBD)W, 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	~31.5 dBm (tuned to the antenna)		
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	oC to +50C (for 20% average duty cycle)	
Maximum Duty Cycle (30dBm)	50% at 35C, 30% at 45C, 20% at 50C	
Operating Environment	o 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 - Order at https://www.sensthys.com/shop/

Model	Region	Antenna Polarization	Flat Mount SKU	VESA Mounting	
SensArray-One	North America	Right Hand Circular (RHCP)	SO21000-FRF	Add VESA Mount Bracket Model # SAA1	
		Left Hand Circular (LHCP)	SO21000-FLF		
	Europe	Right Hand Circular (RHCP)	SO21000-ERF		
		Left Hand Circular (LHCP)	SO21000-ELF		

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