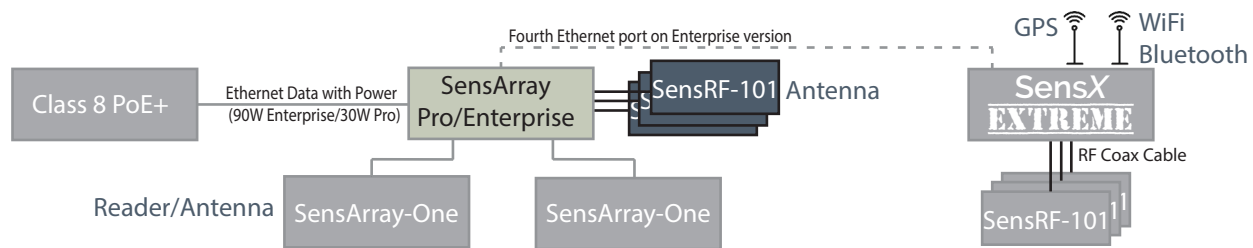




The SensArray *Pro* is a novel RAIN RFID **reader** that also contains an 8.5dBic **antenna**, network **switch** and **power distribution** system. Combined these massively reduce infrastructure and installation costs. All four are consolidated into a svelte, attractive 10" x 10" form-factor. The SensArray *Pro* operates at a full industry maximum of +33dBm via the 30W Class 4 PoE input, so no separate DC power input is required.

Unlike other readers, the SensArray *Pro* passes power **out** to any additional PoE devices in the network **including other SensArray readers** massively reducing cabling and increasing install flexibility.

The reader is available in flat/through-hole mounting or VESA 100mm studded mounting and variants for international regions.



Benefit?	How?	What Does This Mean For Me?
Excellent connectivity for wide variety of sensors and peripherals	Three (3) PoE ports, accepts Class 4 (30W) for extended networking with additional SensArray readers and other PoE devices	Widest variety of devices, now including higher wattage devices, can be connected with just CAT5/6 cabling, simplifying power cabling and distribution.
	Up to 5 readers/chain for large networks (20 read-points)	
	GPIO connection delivers 15W to peripherals	
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!
	Industry-leading unique tag read-rates	
	Integrated antenna (8.5 dBic) plus up to 3 additional antenna ports	
Reduced operational and capital costs	Built-in Ethernet switching and integrated PoE power distribution system for robust performance over simple or complex networks	Reduced cost and complexity due to simple CAT5/6 cabling, fewer reader components and switching and distribution intelligence that are already built-in for existing and future requirements.
	"All-in-one" unit with additional ports for expansion capability	
Building and Community - friendly form factor	Neutral colored, Slim form-factor only 21mm/0.8" thick. Color and silk screening is customizable.	Seamless addition to work environment.

MORE VARIANTS TO SELECT FROM

Love the idea of the form-factor but don't need external antenna or GPIO. The software compatible SensArray-One is for you:

Name	Readers/Chain	Antenna/Chain	PoE	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 Interface Specifications

Parameter	Specification
Data Interface	TCP/IP (RJ-45), 3 ports
PoE Interface	3 ports; PoE+ Class 4 (30W input) PD on Port 0; 56 vDC input
Power Injector/Supply	PoE+ injector, PN SPOE2gWC4; DC Power supply, PN SPS75W56VDC
GPIO	4 input/4 output, provides 24 vdc, .650 mA (15 W)
Software Support	APIs, DLL, sample code, SensThys RFID Console
Power Consumption (33 dBm, Idle)	9W, 3W
Maximum powered chain length, with one unit at 30 dBm	5, with SensThys DC power supply; 4, with SensThys PoE+ injector

RF Specifications

Parameter	FCC	ETSI
Reader Architecture	M-Power	
Reader Protocol	EPC Class 1 Gen 2v2 and 18000 – 6C/63	
Operating Frequency	902.75 MHz – 927.25 MHz	865.6 - 867.6 MHz
Hopping Channels	50	4
Channel Spacing	500 KHz	600KHz
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	
External Antenna ports (SensArray Enterprise and Pro)	3 x RP -SMA connectors	

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; IEC 60950-1

ORDERING INFORMATION - Order at <https://www.sensthy.com/shop/>

Model	Region	Antenna Polarization	Flat Mount SKU	VESA Mounting
SensArray Pro	North America	Right Hand Circular (RHCP)	SP13350-FRF	Add VESA Mount Bracket Model # SAA1
		Left Hand Circular (LHCP)	SP13350-FLF	
	Europe	Right Hand Circular (RHCP)	SP13350-ERF	
		Left Hand Circular (LHCP)	SP13350-ELF	