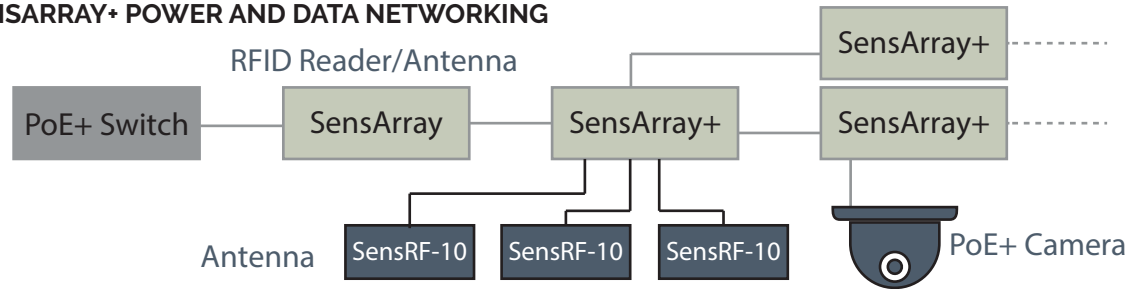


# SensArray® Series



The SensArray® family are disruptive solutions designed to elegantly implement networked RFID solutions at dramatically lower costs. The SensArray achieves this by using functional integration to attack the expense and complexity of installation while simultaneously lowering hardware costs. The SensArray platform combines Ethernet switching and an integrated PoE power distribution system with a high performance integrated RFID reader/antenna.

## EXAMPLE SENSARRAY AND SENSARRAY+ POWER AND DATA NETWORKING



What Does This Do For Me	How?
Minimizes Installation Cost	Integrated Power System
	Can be powered by its nearest neighbor
	Same cable provides power and data (to/from its neighbor)
	Minimizes cable runs to the central switch
	Dramatic reduction of conduit and cable
Minimizes Hardware Cost	Low cost per read point
	Integrated antenna
	Drives up to 3 additional antenna
Simple Project Expansion/Contraction	Add by connecting CAT5/6 to nearest reader
	Remove by disconnecting from its neighbor
Easily Add Peripherals	PoE+ powered SensArray+ can power GPIO peripherals
Inconspicuous and Blend In	Slim form-factor only 21mm/0.8" thick

## TWO VARIANTS TO SELECT FROM

The SensArray family comes in the base SensArray product or the full-featured SensArray+. Both products incorporate the unique power and data distribution allowing these to be routed between multiple SensArray products. The base unit has two Ethernet ports for this purpose and no other I/O. The SensArray+ adds an additional Ethernet port (3 in total) for more complex/robust network topologies, GPIO (power from DC or PoE+), an option for DC power source and finally adds three antenna connections.

Name	DC Power	Ethernet Ports	GPIO	SMA Antenna Ports
SensArray	No	2	No	No
SensArray+	Optional	3	Yes (4 in, 4 out)	3

## Power and Data

Feature	Specification
Data Interface	TCP/IP (RJ-45), 2 ports (3 on SensArray+)
POE+ (Class 4)	PD on Port 0
	PSE on Ports 1 & 2 (SensArray+)
	PoE+ injector, PN SPOE2gWC4
DC power input (SensArray+)	56VDC input
	DC power supply, PN SPS75W56VDC
Software Support	APIs, DLL, sample code, RFID Console
Power Consumption (30dBm, Idle)	9W, 3W
Maximum powered chain length, with one unit at 30 dBm	4, with the SensThys power injector
	5, with the SensThys DC power supply
GPIO (SensArray+)	4 input, 4 output, provides 24 VDC, 0.6A

## RF

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
Internal Antenna	8.5 dBic, right-hand circular
External Antenna (SensArray+)	3 x RP SMA connectors

## PHYSICAL and ENVIRONMENTAL

Feature	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: 2ANPR-SENSARRAY
	IC: 23135-SENSARRAY
	Safety tested to unified 60950-1 (CB Report)

# SensArray<sup>®</sup> Series

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