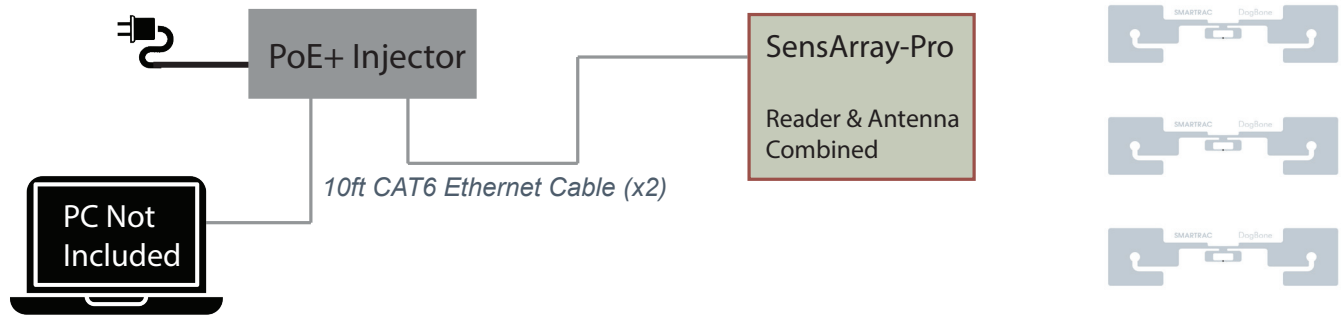# SensorKit™ MT

The SensorKit-MT (Moisture/Temperature) is a simple to use one-stop-shop collection of everything required to evaluate passive sensor tags. This kit is specifically designed for use with the Smartrac Magnus S3 based inlays including the Sensor Dogbone and other Smartrac moisture and temperature sensing tags. The kit is a very inexpensive way to start the evaluation of these tags with a plug and pay kit that includes:

SensorKit-MT

Description	Included in SensorKit
SensArray-Pro (SP13350) **Reader & Antenna Combined**	1
10ft Ethernet Cat6 cable (PC to injector, Injector to reader)	2
POE+ (Class 4) injector (Injects power onto Ethernet cable)	1
Power cable for PoE+ Injector	1
Assorted moisture and tempreature sensing tags	Multiple
Temperature and Moisture reading MS Windows application	Downloadable

Power, RF and Software

Feature	Specification
Data Interface	TCP/IP (RJ-45), 3 ports
POE+ Class 4	RJ-45, PD on Port 0, PSE on Ports 1 and 2
	PoE+ injector, PN SPOE29WC4
DC Power Input	56VDC input
	Optional (not supplied) DC power supply, PN SPS75W56VDC
SensThys Software Support	APIs, DLL, sample code, RFID Console. SDK's: .Net, Ruby, Java.
SensThys RFID Console and Sensor Console	Available from https://www.sensthys.com/downloads/
Power Consumption (30dBm)	9W typical
Power Consumption (Idle)	3W typical
Max Chain Length With One Unit at 30 dBm	4, with the SensThys power injector
	5, with the SensThys DC power supply
Reader Protocol	EPC Class 1 Gen 2 and 18000 – 6C
Operating Frequency	902.75 MHz – 927.25 MHz*
RF Transmitter	< 33 dBm
Modulation Methods	PR-ASK, DB-ASK
20 db Modulation Bandwidth	< 100 KHz
Internal Antenna	8.5 dBic, right-hand circular

* Currently FCC/US frequencies only. ETSI available shortly

Physical and Cabling

Feature	Specification
Dimensions (reader)	(cm) 25.4 x 25.4 x 2.0 • (in) 10 x 10 x 0.8
Weight (reader)	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
Ethernet	2 x 10ft of Cat6, low-loss
Compliance Certifications	FCC Part 15; FCCID: 2ANPR-M-PWRSENS
	IC: Coming soon...
	Safety tested to unified 60950-1 (CB Report)

ORDERING - https://sensthys.myshopify.com/collections/bundles

SensorKit™ MT

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