

Feature / Benefit	Sporlan SMART Service Tool Kit	Imperial iManifold	Yellow Jacket Mantooth	Fieldpiece SMAN-4 SMAN440 SMAN460	Appion
Battery life	≥ 250 hrs	40 hours	~10 hours		160 hours (with radio off)
Battery type	1 x CR2450 replaceable coin cell per sensor	iManifold: 6 x AA Wireless probes: 2 x AAA	1 x rechargeable lithium polymer	6 x AA	3 x AA per sensor
Elevation offset	Manual offset of pressure		Automatically. Elevation can be entered (or found by devices GPS) within the app settings	Automatic pressure offsets	
Ingress Protection Rating (IP Code) <b>*See Ingress Protection Rating (IP Code) Definitions on last page</b>	IP65	iManifold: IP54 Wireless probes: IP50	IP50		IP65
Rugged case included	Yes	No	Yes	No	No
Wire Free Sensors	Yes	No	No	No	Yes
Communication directly to mobile device	Yes	No	Yes	N/A	Yes
Compatible with critically charged systems	Yes		Yes	No	Yes
Pressure sensor connection type	1/8" NPT - Male	1/4" SAE - Female	1/4" SAE Female	Hose: 1/4" SAE - Female	1/8" NPT - Male
Charging port available	No	Yes	Yes	Yes	No
Temperature sensor type	NTC Thermistor	NTC Thermistor	NTC Thermistor	Thermocouple	N/A
Temperature clamp or strap	Clamp	Strap	Clamp	Clamp	No
Temperature clamp or strap size (copper dia. range)	1/4" to 1-5/8"		1/4" to 1-3/8"		N/A
Temperature clamp jaw features	Scrubbing jaw plate	N/A	Rubber jaw plate		N/A
Operating temperature range	0 to 140 deg F	-4 to 140 deg F	-4 to 160 deg F	32 to 122 deg F	0 to 140 deg F (supplied batteries operate 32 to 140 F)
Wireless Capability	Bluetooth Low Energy	Bluetooth, Bluetooth Low Energy, ZigBee	Bluetooth	N/A	Bluetooth

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iOS app	Yes	Yes	Yes	N/A	
Android app	Available in Spring, 2015	Yes	Yes	N/A	Yes
Web access required to run app	No		No	N/A	Yes
App visibility in portrait or landscape modes	Fills Screen	Shrinks to fit width	Portrait only	N/A	
Auto connect feature	Yes		No	N/A	
Ability to trend, record and send data	Over 24 hrs worth of data can be recorded, uploaded to a ".csv" file, and emailed directly from the app.	Data can be recorded and uploaded to a ".csv" file.	Screenshots only	N/A	Trending and sending only
Compatible with all common refrigerants (including ammonia)	Yes. Brass adapter not compatible w/ ammonia	Not compatible with ammonia	Not compatible with ammonia	Not compatible with ammonia	
Number of Refrigerants	65+	45+	98	45	
Refrigerant favorites list available	Yes		No	N/A	
App "mock mode" for demonstrating / training without the use of sensors	Yes		No	N/A	

**\* Ingress Protection Rating (IP Code) Definitions:**

1st numeral - Ingress of Solid Objects	0	(non-protected)
	1	≥ 50 mm diameter
	2	≥ 12.5 mm diameter
	3	≥ 2.5 mm diameter
	4	≥ 1.0 mm diameter
	5	dust-protected
	6	dust-tight
2nd numeral - Ingress of Water	0	(non-protected)
	1	vertically dripping
	2	dripping (15° tilted)
	3	spraying
	4	splashing
	5	jetting
	6	powerful jetting
	7	temporary immersion
	8	continuous immersion

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