

SERVICE MANIFOLD DIGITAL - FIELDPIECE

Gauge Digital Manifold - SMAN3

The SMAN3 is like no other digital manifold on the market—they're the only manifolds that automatically calculate target superheat, so you don't have to worry about guesswork or manual calculations.

Plus they're the only manifolds with the ability to perform a linear adjustment of the pressure sensors based on refrigerant type, temperature, and pressure, and it's so easy, you can do it right in the field.

With the SMAN3 you get a built-in micron gauge with resolution from 50 to 9,999.

On top of that, the SMAN3's exclusive micron alarm allows you to set the alarm to a chosen micron level, and when the vacuum reaches that level, the alarm will sound, freeing you up to keep working when pulling a vacuum.

By combining new technology with an intuitive, easy-to-use interface, the SMAN3 makes it easy for you to quickly maximize the efficiency of any A/C or refrigeration unit.

And because they're built by the HVAC&R industry's leading innovator, you know it's packed with the features you want:

Target Superheat

- Automatically Calculated from Measurements Taken
- No Guesswork

Superheat and Subcooling

- Calculated and Displayed Simultaneously

Multiline Backlit Display

- Resistant to Extreme Temperatures
- Viewable up to 20' Away

K-Type Thermocouples

- Fast Reacting
- Accurate Temperatures
- Displays Actual Temperatures

Field Calibration

- Quick and Easy
- Temperature
- 2-Point Pressure

What's Included:

SMAN3 Adds:

Vacuum Gauge in Microns, (2) K-type Pipe-clamp Thermocouples

Micron Gauge Alarm

- Alarm Sounds When Chosen Micron Level is Reached
- Frees Up Tech to Work While Pulling Vacuum
- 50 to 9,999 Resolution

Vacuum Stopwatch

- Tracks Time Vacuum Pump's Been Working
- Length of Time Can Indicate Hidden Issues

Long Battery Life

- 135 Hours on SMAN3
- Constant Battery Status
- Auto Power Off

39 Refrigerants

- Built-in P-T Charts

Carrying Case

- Easy to Hang When Not Using
- Leave Hoses & Clamps Attached



Specifications SMAN3

Operating environment:

32°F to 122°F (0°C to 50°C)
at <75% relative humidity

Display size:

5 inches (diagonal)

Battery:

6 x AA (Battery life based on alkaline type)

Battery life (SMAN3):

Approx. 135 hours (without backlight)

Low battery indication:

is displayed when the battery voltage drops below the operating level

Auto Shut off:

30 minutes of inactivity (switchable)

Pressure

Connector Type:

Standard 1/4 NPT male flare fitting

Resolution:

0.1 psi/inHg; 1 kPa/cmHg

Accuracy:

29" HgV to 0" HgV: ± 0.2 " HgV,

74 cmHgV to 0 cmHgV: ± 0.4 cmHgV,

0 to 200 Psig: ± 1 Psi,

0 to 1378 KPa: ± 7 KPa,

200 to 500 Psig: $\pm 0.3\% + 1$ Psi,

1378 to 3447 KPa: $\pm 0.3\% + 7$ Kpa

Range:

29" HgV to 500Psig (English),

74 cmHgV to 0 to 4000KPa (Metric)

Maximum Overload pressure: 800 psig

Units: Psig, kPa, inHg, and cmHg

Microns for Vacuum (SMAN3)

Connector Type:

Standard 1/4 NPT male flare fitting

Range:

50 to 9999 microns of mercury

Resolution:

1 micron (50 to 2000 microns),

250 microns (2001 to 5000 microns),

500 microns (5001 to 8000 microns),

1000 microns (8001 to 9999 microns)

Accuracy:

$\pm 10\%$ or ± 10 microns, whichever is greater (50 to 1000 microns)

Maximum Overload pressure:

500 psig

Units:

Microns of mercury

Temperature

Sensor Type:

K-Type thermocouple

Range:

-76°F to 999.9°F

(-60°C to 537.0°C)

Resolution:

0.1°F/°C

Accuracy:

$\pm (1.0^\circ\text{F})$ -76°F to 199.9°F;

$\pm (0.5^\circ\text{C})$ -60°C to 93°C

$\pm (2.0^\circ\text{F})$ 200°F to 999.9°F;

$\pm (1.0^\circ\text{C})$ 93°C to 537.0°C

Note:

accuracies after field calibration.

Fieldpiece Digital SMAN3 Manifold

Airefrig Part Number	Description	List Price Ex GST
SMAN3	Digital Manifolds for HVAC&R (Measures Vacuum in microns)	\$1,109.70

SERVICE MANIFOLD DIGITAL - FIELDPIECE

Gauge Digital Manifold – SMAN4

The SMAN4 is a 4-port, wireless digital manifold with a large 3/8" port for faster evacuations and recovery.

With four ports and a built-in vacuum gauge, HVAC&R professionals can now evacuate a system, pull a vacuum, add refrigerant and dial in the charge at one time, without having to hook and unhook any hoses.

The SMAN4 is the most modern digital manifold for the HVAC&R Technician.

A key feature that leaves the others behind is the ability to do target Superheat wirelessly for fixed orifice & TXV systems.

Unbeatable value in the SMAN4 with a built-in Vacuum Gauge, measuring down to 50 micron!

Features and Inclusions:

- Wireless measurements for inputting temperature & pressure via our ET2W Transmitters and Accessory Heads. [not included]
- Send information to our HG3 Analyser wirelessly for system analysis & logging.
- Measures Temperature x 2 (°C/°F)
- Measures Pressure x 2 (cmHgV-KPa/inHgV-PSIg)
- Measures Vacuum in microns with Hi and Lo adjustable Vacuum alarm points with vacuum timer function
- Calculates Actual Superheat and Subcooling
- Calculates Target Superheat for Fixed Orifice systems
- Huge backlit Extreme Temp Display with toughened Polycarbonate Face shield
- 39 Refrigerants built-In. Includes latest R22 alternatives
- Easy Temperature calibration
- Baseline and Span Pressure Calibration
- Long Battery life with Auto Power-Off
- Simultaneous display of Target Superheat, Superheat and Subcooling
- Magnetic Hook & Thermocouple Clamp storage
- Drawstring Pouch & Hose storage ports
- Sight glass for indication
- Wet and Dry bulb K-Type thermocouples included in both models
- Dual Fieldpiece K-Type Pipe Thermocouples Code : ATC1



Specifications SMAN4

<p>Wireless Range: Up to (30m) Initial wireless syn range: within 3m Mini-USB port: for firmware updates Operating environment: 32°F to 122°F (0°C to 50°C) at <75% relative humidity Display size: 5 inches (diagonal) Battery: 6 x AA (Battery life based on alkaline type) Battery life (SMAN4): Approx. 135 hours (without "blue" backlight & wireless) Low battery indication: is displayed when the battery voltage drops below the operating level Auto Shut off: 30 minutes of inactivity (switchable)</p>	<p>Pressure: Sensor type: Absolute pressure sensor Connector type: Standard 1/4 NPT & 3/8NPT male flare fitting Resolution: 0.1 psi/inHg; 1 kPa/cmHg; 0.001MPa; 0.01bar Accuracy: 29" HgV to 0" HgV: ±0.2" HgV, 74 cmHgV to 0 cmHgV: ±1 cmHgV, 0 to 200 Psig: ±1 Psi, 0 to 1378 KPa: ±7 KPa, 200 to 580 Psig: ±0.3%+1 Psi, 1378 to 4000KPa: ±0.3%+7 Kpa Range: 29" HgV to 580Psig (English), 74 cmHgV to 0 to 4000KPa (Metric) Maximum Overload pressure: 800 psig Units: Psig, kPa, MPa, bar, inHg, & cmHg</p>	<p>Microns for Vacuum (SMAN4) Connector Type: Standard 1/4 NPT & 3/8NPT male flare fitting Range: 50 to 9999 microns of mercury Resolution: 1 micron (50 to 2000 microns), 250 microns (2001 to 5000 microns), 500 microns (5001 to 8000 microns), 1000 microns (8001 to 9999 microns) Accuracy: ±10% or ±10 microns, whichever is greater (50 to 1000 microns) Maximum Overload pressure: 500 psig Units: Microns of mercury</p>	<p>Temperature Sensor Type: K-Type thermocouple Range: -76°F to 999.9°F (-60°C to 537.0°C) Resolution: 0.1°F/°C Accuracy: ±(1.0°F) -76°F to 199.9°F; ±(0.5°C) -60°C to 93°C ±(2.0°F) 200°F to 999.9°F; ±(1.0°C) 93°C to 537.0°C Note: accuracies after field calibration.</p>
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Fieldpiece Digital SMAN4 Manifold

Airefrig Part Number	Description	List Price Ex GST
SMAN4	Digital Manifolds for HVAC&R (Measures Vacuum in microns)	\$1,413.45

SERVICE MANIFOLD & GAUGES - CPS

VORTEX™ Series Manifolds

Advanced VVS diaphragm valve system
Precision machined aircraft aluminum body
Precision flutter-free metal cased gauges
Certified 15 micron vacuum rating
Over-sized refrigerant sight glass
Heavy duty plastic handles

BLACKMAX™ Series Manifolds

Exclusive Triple seal piston valve design
Precision flutter-free metal cased gauges
Anodized aluminium block body
Floating nylon sealing disk
Heavy duty plastic handles

WORKINGMAN Manifold

Exclusive Triple seal piston valve design
Precision machined aircraft aluminum body
"Gorilla Grip" TPE coated metal knobs
Heavy duty Santoprene gauge boots
Custom fitted carry case when hose taken
1% measurement accuracy

CPS Vortex Series Manifold & Gauges

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MV2T	R22 R134A R404A	2 Valve	68mm	1/4 Flare	N/A	\$228.39
MV4T		4 Valve	68mm	1/4 Flare		\$350.10
MV12BJ5	R410A	4 Valve	68mm	1/2"-20UNF	3x 1525mm	\$524.97

The sets above are supplied with Rubber Boot Gauge Protectors



CPS Black Max Series Manifold & Gauges

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MBT	R22 R134A R404A	2 Valve	68mm	1/4 Flare	N/A	\$147.84
MBY	R22 R407C	2 Valve	68mm	1/4 Flare		\$147.84
MBHCP3	R290 R600a (Hydrocarbons)	2 Valve	68mm	1/4 Flare	3 x 915mm	\$234.57



CPS Workingman Series Manifold & Gauges (with Carry Bag)

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MT2T7P3AA	R22 R134A R404A	2 Valve	80mm	1/4 Flare	3x 915mm	\$258.30
MT2T7P5AA	R22 R134A R404A	2 Valve	80mm	1/4 Flare	3x 1525mm	P.O.A.
MT11B7J5	R410A	2 Valve	80mm	1/2"-20UNF	3x 1525mm	\$270.60
MT32B7J5	R410A & R32	2 Valve	80mm	1/4 Flare	3x 1525mm	\$268.80
MT2CO2PSE	CO ²	2 Valve	80mm	TBA	3x 1525mm	\$340.83



CPS Gauges

Airefrig Part Number	Description	Diameter mm	Refrigerants	List Price Ex GST
RGTH	Gauge High Pressure	68	R22 R404A R134A	\$38.97
RGTL	Gauge Compound			\$38.97
RGYH	Gauge High Pressure		R22 R407C	\$38.97
RGYL	Gauge Compound			\$38.97
RGBH	Gauge High Pressure		R410A	\$38.97
RGBL	Gauge Compound			\$38.97
RGHCH	Gauge High Pressure	68	R290 R600A (Hydrocarbons)	P.O.A.
RGHCL	Gauge Compound			P.O.A.
RGPH	Gauge High Pressure	80	R22 R404A R134A	\$84.57
RGPL	Gauge Compound			\$84.57
RGT7H	Gauge High Pressure		R22 R404A R134A Suit Workingman Series	P.O.A.
RGT7L	Gauge Compound			P.O.A.
RGB7H	Gauge High Pressure		R410A Suit Workingman Series	P.O.A.
RGB7L	Gauge Compound			P.O.A.
RGX68L	Replacement Cover Lens suit 68mm Gauges			\$24.21
RGX68BB	Rubber Boot Gauge Protector 68mm – Blue			\$13.53
RGX68RB	Rubber Boot Gauge Protector 68mm – Red			\$13.53



- No flutter gauge design
- Easy to read colour coded dials
- Durable metal casing
- Front calibration access port
- High impact pop in lexan lens
- 1/8" NPT brass connection

TOOLS R410A SPECIFIC - CPS

CPS R410A Manifold & Hose Sets

Airefrig Part Number	Refrigerants	Manifold Type	Gauges Diam.	Connections	Hose Qty & Length	List Price Ex GST
MV12BJ5	R410A	4 Valve	68mm	1/2"-20UNF	3 x 1525mm	\$524.97
MT11B7J5	R410A	2 Valve	80mm	1/2"-20UNF	3x 1525mm	\$270.60



CPS R410A Charging Hoses (1/2"-20UNF)

Airefrig Part Number	Description	List Price Ex GST
HJ3	Hose Set 900mm Long – Blue, Red, Yellow (R410A)	\$89.97
HJ5	Hose Set 1500mm Long – Blue, Red, Yellow (R410A)	\$121.77
HJ3B	Hose 900mm Long – Blue (R410A)	\$31.11
HJ3R	Hose 900mm Long – Red (R410A)	\$31.11
HJ3Y	Hose 900mm Long – Yellow (R410A)	\$31.11
HJ5B	Hose 1500mm Long – Blue (R410A)	\$41.94
HJ5R	Hose 1500mm Long – Red (R410A)	\$41.94
HJ5Y	Hose 1500mm Long – Yellow (R410A)	\$41.94
HXG2	Hose Gasket to suit CPS 410A Hoses	\$11.37
BV410	Ball Valve 1/2" 20 UNF M x 1/2" 20 UNF Female Ball	\$45.69



CPS R410A Torque Wrenches

Airefrig Part Number	Description	List Price Ex GST
TLTWSM	Torque Wrench Set – Metric (Interchangeable heads: 17, 22, 24, 26, 27, 29 mm)	\$243.54
ATQS41	Torque Wrench Set of 4 (1/4", 3/8", 1/2" & 5/8")	\$676.50



CPS R410A Flaring Tools

Airefrig Part Number	Description	List Price Ex GST
800FN	Flaring Tool 1/4" - 3/4"	\$565.80
FT800FN	Flaring Tool 1/4" - 3/4" with Ratchet	\$473.55



FT800FN

CPS R410A Access Fittings

Airefrig Part Number	Description	List Price Ex GST
AD71	3/4" Female BSP x 1/2"-20UNF Male Adaptor (cylinder adaptor)	\$12.93
AD78	1/4" Female Flare x 1/2"-20UNF Male Adaptor	\$12.84
TLVCS410	Valve Core Remover Tool for R410A with Side Access	\$129.90
A44000	Access Valve Tool with Core Depressor – R410A	\$105.78
AV4410	Schrader Access Valve R410A – 4" Copper Tail	\$34.65



AD78



TLVCS410



A44000



AV4410