

Digital Manifolds - SMAN2 & SMAN3



**Professional Jobs
Made Easier**

- Auto Target Superheat.
- Simultaneously Displays Superheat & Subcooling.
- K-type Thermocouple.
- Backlit Multi-line Display.
- Extra Long Battery Life.
- Micron Alarm. (SMAN3)
- Vacuum Timer. (SMAN3)

What is It?

The SMAN2 and SMAN3 are like no other digital manifolds 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 also 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.

Features and Benefits

By combining new technology with an intuitive, easy-to-use interface, the SMAN2 and SMAN3 make it easy for you to quickly maximize the efficiency of any A/C or refrigeration unit. And because they're built by the HVACR industry's leading innovator, you know it's packed with the features you want.

Target Superheat

- Automatically calculated from measurements taken
- No guesswork or manual calculations

Micron Gauge Alarm (SMAN3)

- Alarm sound when chosen micron level is reached
- 50 to 9,999 resolution

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

Vacuum Stopwatch (SMAN3)

- Tracks time vacuum pump's been working
- Length of time can indicate hidden issues

Long Battery Life

- 500 hours on SMAN2
- 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

Competitive Advantages

The SMAN2 and SMAN3 are simply the best manifolds on the market. They're easy to use, display dual pressure and temperature, calculate in both Fahrenheit and Celsius, have a temperature resistant display, and the convenient carrying bag allows you to hang or carry the manifold without having to take off the hoses. They are also the only manifolds that you can do a two-point pressure calibration on to ensure your pressure is accurate.

What's Included SMAN2

- Wet bulb thermocouple
- Dry bulb thermocouple
- Protective case
- Operator's manual



What's Included SMAN3

- Wet bulb thermocouple
- Dry bulb thermocouple
- Vacuum gauge in microns
- Two K-type thermocouples pipe clamps
- Protective case
- Operator's manual



Specifications

TECHNICAL SPECIFICATIONS

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 (SMAN2): Approx. 500 hours (without backlight)

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 only)

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.

Refrigerants

The P-T charts of the following refrigerants come pre-programmed into your SMAN. In your SMAN the refrigerants are listed in order of most commonly used. Here, they are listed in numerical order for easy reference:

R11, R113, R114, R123, R124, R125, R13, R134A, R22, R23, R401A(MP39), R401B, R402A, R402B, R404A, R406A, R407A, R407C, R408A, R409A, R410A, R414B(Hotshot), R416A, R417A, R420A, R421A, R421B, R422A, R422B(NU22B), R422C(Oneshot), R422D, R424A, R434A(RS-45), R438A(M099), R500., R502, R503, R507A