

# All New SMANs

## The Heart of Your Job

### SMAN™ Refrigerant Manifolds with Micron Gauge



SM480V



SM380V



Tools HVACR Pros Trust

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# Designed for Performance



Knowledge, power and experience are packed into the newly designed SMAN™ Refrigerant Manifolds. Years of feedback from A/C and refrigeration specialists is combined with Fieldpiece's laser focus on continuous improvement to bring you the toughest, most advanced digital refrigerant manifold on the market.

From the extremely rugged overmold casing, reinforced hook, and hermetically sealed sight glass, to the wireless capabilities, data logging, and tightness test, the SM380V and SM480V are built so you can do your job easier, faster and better.

## Rugged Construction

The new SMANs are simply strong. The heavy duty casing, reinforced hook, water resistant, impact resistant screen, strategically placed thermocouple ports, and hermetically sealed sight glass, all ensure the SMANs are ready to withstand the rigors of field use.

**Water Resistant  
(IP54)**

**Beefy  
Hook**

**Impact Resistant  
Case**

**3 Protected  
Thermocouple  
Jacks**



## Packed with Knowledge

The SM380V and SM480V are designed to work the way you do with advanced features to streamline your job and provide your customers with the answers they need.

## Data Logging

- Stores up to 9 jobs internally
- Easy download via USB port
- Displays % free storage space before logging begins
- Logs up to 7 days (168 continuous hours)

## Tightness Test

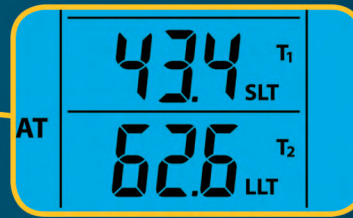
- Check for leaks after repairs or installations
- View pressure differential over time
- Timer tracks duration of test
- Temperature compensated with SL temp to avoid false positives

## Customizable

- Adjust auto power off duration
- Adjust back light duration
- Set high and low vacuum alarms

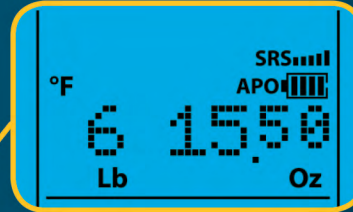


## View Wireless Probe and Scale Readings on SM380V and SM480V



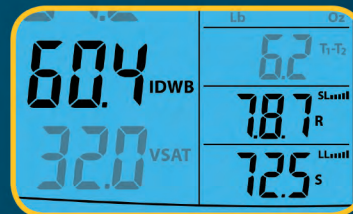
### Pipe Temperatures

Place pipe clamps in the perfect location and view instantaneous readings on your screen.



### Refrigerant Usage

Monitor and record live refrigerant usage for precise recovery, charging and documentation.



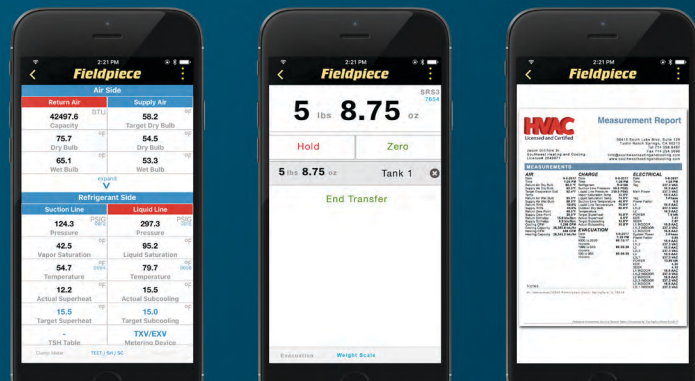
### Indoor Air Temperatures

View live air measurements and calculations on your SMAN while making adjustments.

## Increase Professionalism with Job Link® System App

Streamline and simplify your call even further with the Job Link System App. See your measurements up to 350' away on your mobile device. Document your work and provide professional reports, including refrigerant weight usage, by simply connecting to the Job Link System app. Helps to reduce call-backs and increase profits.

- View measurements on SMAN and/or in Job Link App
- Monitor and record refrigerant weight
- Direct 350' wireless range (no transmitter needed)



# SMAN™ Refrigerant Manifold Specifications\*



SM380V



SM480V

## General

- Display:** LCD (5 inches diagonal)
- Backlight:** Blue (adjustable duration)
- Over Range Display:** OL for pressure, --- for temperature
- Auto Power Off:** 30 minutes of inactivity (adjustable)
- Maximum Manifold Pressure:** 800 Psig (5500 kPa)
- Battery Type:** 6 x AA alkaline
- Battery Life:** 350 hours typical (without vacuum, backlight, and wireless)
- Radio Frequency:** 2.4 GHz
- Wireless Range:** 350 feet (106 meters) line of sight  
Distance decreases through obstructions
- Data Port:** Micro USB (for extracting logged data or updating firmware)
- Operating Environment:** 32°F to 122°F (0°C to 50°C) at <75% RH
- Storage Environment:** -4°F to 140°F (-20°C to 60°C) at <80% RH  
(with battery removed)
- Temperature Coefficient:** 0.1 x (specified accuracy) per °C  
(0°C to 18°C, 28°C to 50°C), per 1.8°F (32°F to 64°F, 82°F to 122°F)
- Weight:** 4.03 lbs (1.83 kg)
- Water Resistant:** Designed to IP54
- US Patent:** [www.fieldpiece.com/patents](http://www.fieldpiece.com/patents)
- Refrigerants:** New refrigerants are continually being added so be sure to visit  
[www.fieldpiece.com](http://www.fieldpiece.com) for the latest firmware

## Pressure

- Sensor Type:** Absolute pressure sensors
- Port Type:** (3) 1/4" standard NPT male flare fittings (SM380V)  
(1) 3/8" and (3) 1/4" standard NPT male flare fittings (SM480V)
- Pressure Range and Units:** 580 Psig (English), 40.00 Bar (Metric), 4.000 MPa  
(Metric), and 4000 kPa (Metric)
- Negative Pressure Range and Units:**  
29 inHg (English), 74 cmHg (Metric)
- Resolution:** 0.1 Psig; 0.01 Bar; 0.001 MPa; 1 kPa; 0.1 inHg; 1 cmHg
- Negative Pressure Accuracy:**  
29 inHg to 0 inHg: ±0.2 inHg;  
74 cmHg to 0 cmHg: ±1 cmHg
- Pressure Accuracy:**  
0 Psig to 200 Psig: ±1 Psig;  
200 Psig to 580 Psig: ±(0.3% of reading + 1 Psig);  
0 Bar to 13.78 Bar ±0.07 Bar;  
13.78 Bar to 40.00 Bar: ±(0.3% of reading + 0.07 Bar);  
0 MPa to 1.378 MPa: ±0.007 MPa;  
1.378 MPa to 4.000 MPa: ±(0.3% of reading + 0.007 MPa);  
0 kPa to 1378 kPa: ±7 kPa;  
1378 kPa to 4000 kPa: ±(0.3% of reading + 7 kPa)

\*The SM380V and SM480V have the same specifications and features, with the only difference being their number of ports.

## Temperature

- Sensor Type:** Type K thermocouple  
(nickel chromium/nickel aluminum)
- Jack Type:** (3) Type K thermocouple
- Range:** -50°F to 257°F (-46°C to 125°C), limited by the thermocouple specification.  
Display range is -95°F to 999.9°F (-70°C to 537.0°C)
- Resolution:** 0.1°F (0.1°C)
- Accuracy:** Shown accuracies are after field calibration.  
±(1.0°F) -95°F to 200°F, ±(2.0°F) 200°F to 999.9°F;  
±(0.5°C) -70°C to 93°C, ±(1.0°C) 93°C to 537.0°C

## Deep Vacuum

- Sensor Type:** Thermistor
- Port Type:** (3) 1/4" standard NPT male flare fittings (SM380V)  
(1) 3/8" and (3) 1/4" standard NPT male flare fittings (SM480V)
- Range and Units:**  
50 to 9999 microns of mercury (English)  
6 to 1330 Pascals (Metric)  
0.06 to 13.3 mBar (Metric)  
50 to 9999 mTorr (Metric)  
0.05 to 10 Torr (Metric, equivalent to mmHg)

## Best Resolution:

- 1 micron of mercury (below 2000 microns)
- 1 Pascal (below 250 Pascals)
- 0.001 mBar (below 2.5 mBar)
- 1 mTorr (below 2000 mTorr)
- 0.001 Torr (below 2.5 Torr)

## Accuracy @ 77°F (25°C):

- ±(5% of reading + 5 microns of mercury)
- ±(5% of reading + 1 Pascal)
- ±(5% of reading + 0.01 mBar)
- ±(5% of reading + 5 mTorr)
- ±(5% of reading + 0.005 Torr)

## Wireless Compatibility

Latest compatibility at [www.fieldpiece.com](http://www.fieldpiece.com)

## Job Link System Minimum Device Requirement:

BLE 4.0 devices running iOS 7.1 or Android™ Kitkat 4.4

## Wireless Measurement Source Assignments:

- Suction line temperature: Fieldpiece model JL3PC (set to blue)
- Liquid line temperature: Fieldpiece model JL3PC (set to red)
- Supply air psychrometer: Fieldpiece model JL3RH (set to blue)
- Return air psychrometer: Fieldpiece model JL3RH (set to red)
- Refrigerant weight scale: Fieldpiece models SRS3, SRS3P

## What's included

- SM380V or SM480V SMAN Refrigerant Manifold
- (2) TC24 Type K Pipe Clamp Thermocouples
- (1) ATA1 Type K Bead Thermocouple w/Clip
- (1) ANC11 Padded Drawstring Case



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