# **SMARECH**<sup>®</sup> Wireless Digital Manifold

Isn't it time to give your brain a rest? Work smarter with Uniweld's SmarTech Wireless Digital Manifold...

### **Unexpectedly More!**





For more information about the amazing Wireless Smartech<sup>™</sup> Manifold Please Scan QR code with Smart Phone or visit us at www.uniweld.com

Smartphone pictured not included



vnload on the

App Store

Ball Valve Vacuum Rated to 20 Microns! Specifically designed for the HVAC/R industry to hold Vacuum and Pressure.

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#### Part# USMAN145



#### **FEATURES**

Measures High and Low Side Pressure and Temperature SmarTech<sup>™</sup> App (Free Download) for compatible iOS and Android smart devices\* Superheat and Subcool Automatically calculated in real time by the SmarTech<sup>™</sup> App Smart Charge Zone<sup>™</sup> - Color coded differential for accurate "In the Zone" system charge Wirelessly connects to BLE or Bluetooth® 4.0 compatible smart device. Export a SmarTech<sup>™</sup> Verified Report and email system performance data as a PDF or CSV file Protective Rubber Boot and easy access double zipper padded case with storage pockets 111 NIST Refrigerant Profiles included; SmarTech™ App upgradeable with free updates

R-11, R-12, R-13, R-21, R-22, R-23, R-32, R-41, R-113, R-114, R-115, R-116, R-123, R-124, R-125, R-134a, R-141B, R-142B, R-143A, R-152A, R-218, R-227ea, R-236ea, R-236fa, R-245ca, R-290, R-365MFC, R-401A (MP39), R-401B, R-401C, R-402A, R-402B, R-403A, R-403B, R-404A, R-405A, R-406A, R-407A, R-407B, R-407C, R-407D, R-407E, R-407F, R-408A, R-409A, R-409B, R-410A, R-410B, R-411A, R-411B, R-412A, R-413A, R-414A, R-414B (Hotshot), R-415A, R-415B, R-416A, R-417A, R-418A, R-419A, R-420A, R-421A, R-421B, R-422A, R-422B (NU22B), R-422C (Oneshot), R-422D, R-423A, R-424A, R-425A, R-426A, R-427A, R-428A, R-429A, R-430A, R-431A, R-432A, R-433A, R-434A (RS-45), R-435A, R-436A, R-436B, R-437A, R-438A (MO99), R-441A, R-442A, R-443A, R-444A, R-453A, R-458A, R-500, R-501, R-502, R-503, R-504, R-507A, R-508A, R-508B (Suva95), R-509A, R-510A, R-512A, R-600, R-600A, R-601, R-601A, R-717, R-744, R-1234YF, R-1234ZE, R-1270, R-E170

#### SPECIFICATIONS

Pressure Measuring Range:	-29.9 to 0 to 650 psig
Pressure Reading:	psig, bar, kPa, Kg/cm <sup>2</sup>
Pressure Resolution:	0.1 psig, 0.01 bar, 0.01 kPa, 0.01 Kg/cm <sup>2</sup> , 0.1 inHg
Pressure Accuracy:	inHg: -29.9 to 0, ± 2
	<b>PSIG:</b> 0 to 200, $\pm 1$ ; 200 to 650 $\pm$ (0.3% reading +1)
	BAR: 0 to 13.79, ± 0.07; 13.79 to 44.82, ± (0.3% reading + 0.07)
	<b>kPa:</b> 0 to 1379, ±7; 1379 to 4482, ± (0.3% reading +7)
	Kg/cm <sup>2</sup> : 0 to 14.06, $\pm$ 0.07; 14.06 to 45.71, $\pm$ (0.3% reading + 0.07)
Proof Pressure:	Pressure w/o internal damage 800 psig
Burst Pressure:	Pressure w/o loss of seal 2000 psig
Pressure Zeroing:	Reset Pressure & Temperature Sensors to Factory Default
Temperature Clamps:	K-Type Thermocouple with 6 ft. lead
Temperature Sensor Range:	-40 °F to 266 °F (-40 °C to 130 °C)
Temperature Accuracy:	±2°F,±1℃
Temperature Resolution:	0.1 °F or °C
Elevation Compensation:	Enter elevation into app for automatic P/T compensation
Batteries:	6xAA
Battery Life:	150 hours without backlight and wireless
Auto Power Off:	Settings; 30 Min., 60 Min., 120 Min. or Manual On/Off (60 Min.)
Screen Display:	LCD with On/Off Display Backlight

\* Compatible with iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 4, iPhone4s, iPad Air 2, iPad Air, ield mini 3, iPad mini 2, iPad mini 2, iPad mini Pad with Retina Display, iPad (4th generation), iPad (3th generation) iPad 2. iPhone and iPad are registered trademarks of Apple, Inc., registered in the U.S. and other Countries. Compatible with Andriod 4.4 or higher. Android is a trademark of Google Inc. Bluetooth® is a trademark of Bluetooth® SIG.

#### SMART CHARGE ZONE™

Color coded differential for accurate "In the Zone" system charge.

SUBCOOLING (TXV)		RED ZONE
TARGET	10.0 °F	System is over charged
ACTUAL	14.6 °F	with refrigerant and requires
DIFF.	4.6 °F	removal of excess
		refrigerant
SUBCOOLING (TXV)		GREEN ZONE
TARGET	10.0 °F	System is properly charged
ACTUAL	10.3 °F	for maximum efficiency and
DIFF.	0.3 °F	optimal performance
<u> </u>		
SUBCOOLING (TXV)		BLUE ZONE
TARGET	10.0 °F	System is under charged
ACTUAL	4.2 °F	and requires

DIFF.

NE arged and requires additional refrigerant







Smartphone pictured not included

## **Unexpectedly More!**

The Uniweld SmarTech<sup>™</sup> Wireless Digital Manifold communicates with your Android or iOS smart device using our free downloadable app. The SmarTech<sup>™</sup> app, with 111 refrigerant profiles, calculates and displays the system's real time pressures, temperatures, Superheat and Subcooling in a user friendly format.

SmarTech's digital accuracy takes the guess work out of properly charging a system for maximum efficiency and optimal performance.

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#### **BALL VALVE**

Uniweld Ball Valve specifically designed for the HVAC/R industry to hold vacuum and pressure.



After nitrogen pressure test, open the ball valve to purge the manifold and hoses.

Vacuum Rated to 20 microns. After system evacuation, close the ball valve to disconnect from pump and charge system.





#### EASY ACCESS

Multi function ¼" Male Flare "T" Fitting built into the blue hose for connecting a Vacuum Gauge or Simplified Purging and Charging Refrigerant. Uniweld Vacuum Gauge (Part #UVG) not included, sold separately. (Patents Pending)





#### **EZ TURN ANTI-BLOWBACK HOSES**

5 Ft. Red and Blue Hoses with EZ Turn Anti-Blowback Fittings that feature our exclusive thrust bearing that reduces friction so the service hose can be easily connected to the access fitting while under pressure. (Patents Pending).



#### **ACCURATE TEMPERATURE**

Red and Blue Temperature Clamps, K-Type with 6 Ft. Lead and (2) K-Type Thermocouple Bead Probes.





Export a SmarTech Verified Report and email system performace data as a PDF or CSV file that can be easily tracked and saved.

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#### SMARTECH™ WIRELESS DIGITAL MANIFOLD

#### PART# USMAN145

INCLUDES: (1) Yellow 5 Ft. Ball Valve Hose Vacuum Rated to 20 Microns, (1) Red 5 Ft. EZ Turn Hose, (1) Blue 5 Ft. EZ Turn Hose with 1/4 Male Flare "T" Fitting, (1) Blue and (1) Red K-Type Temperature Clamp with 6 Ft. Lead, (2) Thermocouple Bead Probes, (1) SmarTech Protective Padded Case, (6) AA Batteries, (10) Velcro Straps. US & International Patents Pending.

USVS5

#### **REPLACEMENT PARTS**

USTCK	Temperature Clamp K-Type with 6 Ft. Lead and (5) 5" Velcro Cable Tie Straps.
USTBP	Thermocouple Bead Probe
EZ5R	5 Ft. EZ Turn Anti-Blowback Hose, Red
EZT5B	5 Ft. EZ Turn Anti-Blowback Hose with EZ Access "T" Fitting™, Blue
H5BVY	5 Ft. Ball Valve Hose, Yellow Vacuum Rated to 20 Microns
USVS5	5" Velcro Cable Tie Strap (Pkg. of 5)



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EZ5R

EZT5B

H5BVY