MANTOOTH WIRELESS VACUUM GAUGE AND P/T GAUGE COMBINATION



The YELLOW JACKET ManTooth-PTV (67023) shown above provides vacuum and high- and low-side P/T readings. This full set includes dual non-tethered pressure/temperature gauges, two wired temperature clamps, and one interchangeable vacuum gauge. The single ManTooth-PTV (67021) can be combined with an existing ManTooth P/T device (67001) for adding wireless vacuum capability and/or expanding it to a full system analysis tool. Simply update your ManTooth P/T app to version 2.0, connect to the 67020 hardware, and you're ready to go!

To enable mounting on 5/16" systems, add coupler 19221 (90°) or 19121 (straight).

Product Features:

- Interchangeable/removable vacuum gauge
- Easy-to-clean vacuum sensor
- · Built-in Schrader cores for easy refrigerant charging
- · Operates with and without hoses attached
- Two year warranty
- High impact glass reinforced housing
- Rechargeable LiPo battery for long battery life
- Robust/rugged vacuum sensor
- Integral magnet for mounting on framework
- Integrated rubber side grip for easy handling

App Features:

- Available in English, French, Spanish, Dutch, and German.
- Data logging to record and document values during servicing
- Improved connectivity and reconnect process if signal is lost
- Ability to download logged data for graphing in Excel
- For iOS and Android devices
- Backwards compatible with existing ManTooth Devices (excluding vacuum gauge)

UPC#	Description
67020	ManTooth [™] -V (Vacuum only) with side grip
67021	ManTooth [™] -PTV Single with side grip
67023	ManTooth [™] -PTV Dual with side grip
UPC#	Replacement Parts
67030	Vacuum gauge
67012	USB Cord
67014	Carrying case
93394	Tether cap
19020	Hose gaskets (10 pak)
19121	Straight 5/16" Flare quick connect x 1/4" Male coupler
19221	90° 5/16" Flare quick connect x 1/4" Male coupler
19302	Valve depressor (10 pak)
19305	Schrader valve (10 pak)

Pressure/Temperature Specifications

Pressure Sensing Resolution 0.1 psi, 0.1 bar, 1 kPa, 0.001 MPa, 0.01 kg/cm²

Pressure Sensing Accuracy 0.5% of full scale at 25°C; 1% of full scale 55°F to 130°F; 2% of full scale -40°F to 248°F

Working Pressure 0 – 700 psia (48.3 bar)

Proof Pressure Tolerable pressure without internal damage 1000 psia
Burst Pressure Tolerable pressure without loss of seal 1500 psia

Temperature Sensor Range (Instrument) Sensing element: -40°F to 266°F (-40°C to 130°C); Max Cord temp: 176°F (80°C); Max Clamp Temp: 203°F (95°C)

 $\begin{tabular}{ll} Temperature Display Resolution & 0.1°F or °C \\ Temperature Accuracy (Instrument) & \pm 0.2°C (\pm 0.36°F) \\ \end{tabular}$

Working Temperature -4°F to 160°F (-20°C to 71°C) Limited by battery

Storage Temperature -4°F to 160°F (-20°C to 71°C) - for best battery performance do not store at over 100°F (38°C)

Working Humidity 0-95% RH (non-condensing)

IP Class IP 50

Bluetooth Range 70-90 ft. (Class 1) or 30-40 ft. (Class 2) in most cases (varies depending on the Bluetooth capability

Rechargeable LiPo battery for 10+ hours continuous life

of smart device used). Under perfect conditions (clear line of sight and low interference)

communications can extend up to 300 feet.

Bluetooth Radio Class 1 Bluetooth 2.1 Radio

Size and weight 6" long x 1.6" wide x 2.3" thick (15.3 x 4 x 5.8 cm); 0.5 lbs (225 grams)

Superheat and Subcool Automatically calculated by the ManTooth App

Max. and Min. Pressures

Displays and records the maximum and minimum pressures

Refrigerant Database 98 NIST refrigerant profiles included; upgradeable

Screenshot Feature Save pressure and temperature readings from your sessions; automatically organize

Temperature Sensors Capable of measuring 2 temperatures using high accuracy NTC thermistors
Pressure Transducers 67001/67003 – one pressure transducer; 67002 – two pressure transducers
System Attachment Very small internal volume minimizes refrigerant loss during system analysis.

Pressure Zeroing Simple single button zeroing at the start of each session

Elevation Compensation Enter elevation at the start of the session for effortless psia compensation

Vacuum Specifications

Battery

Cord Length Approximately 33"

Magnet Strength 8 lbs. holding force

Operational Temperature Range 10 – 122F 12 – 50C

Calibration Calibration standards traceable to NIST

Resolution .1 micron
Warm-Up Time and Response Time Instant

0.1 psi, 0.1 bar, 1 kPa,

MANTOOTH WIRELESS DIGITAL PRESSURE/TEMPERATURE GAUGE



The YELLOW JACKET® ManTooth™ Wireless Digital Pressure/ Temperature Gauge provides wireless connection to your smart device so you can test the system without losing refrigerant (no hoses or manifolds necessary)!

The free downloadable ManTooth RSA app wirelessly calculates and displays the system's actual pressures, temperatures, superheat and subcooling in an easy-to-read color format on your iPhone®, iPad® or Android™ device.

Additional Features:

- Built-in Schrader ports to easily adjust refrigerant charge
- Range up to 400' (unobstructed)
- YELLOW JACKET ManTooth RSA app (free download)
- Two-year warranty
- Screenshot feature allows you to save pressure and temperature readings from your sessions which can be automatically organized by location and unit being serviced
- Share screenshots via e-mail right from your phone
- Easily track and store service history
- Rechargeable lithium polymer battery with 10 hours battery life

The ManTooth Single Pressure Wireless Digital P/T Gauge includes a single hardware device and clamp. Two single units can be purchased in a case by ordering Part #67003.

For dual pressure readings, use two of the 67001 ManTooth single pressure gauges or the 67002 ManTooth Dual Pressure Unit which comes with a P/T module, tether unit and two temperature probe clamps. This unit also includes a convenient carrying case which can be purchased separately for the single pressure unit.

UPC#	Description
67001	ManTooth™ Single Pressure Gauge (includes P/T Module with boot, temperature probe clamp, and USB cable)
67002	ManTooth™ Dual Pressure Gauge Set (includes P/T Module and tether unit with boots, two temperature probe clamps, and USB cable in case)
67003	Two (2) ManTooth [™] Single Pressure Gauges (includes two P/T Modules with boots, two temperature probe clamps, and two USB cables in case)
UPC#	Replacement Parts
UPC# 67010	Replacement Parts Clamp
67010	Clamp
67010 67012	Clamp USB Cord
67010 67012 67013	Clamp USB Cord Blue boot
67010 67012 67013 67014	Clamp USB Cord Blue boot Carrying case
67010 67012 67013 67014 93394	Clamp USB Cord Blue boot Carrying case Tether cap

Specifications:

Pressure Sensing Resolution

Pressure Sensing Accuracy

Working Pressure **Proof Pressure**

Burst Pressure

Temperature Sensor Range (Instrument)

Temperature Display Resolution Temperature Accuracy (Instrument) Working Temperature Storage Temperature Working Humidity IP Class Battery Life Range

Bluetooth Radio Size

Superheat and Subcool

Max. and Min. Pressures

Refrigerant Database

Screenshot Feature

Temperature Sensors

Pressure Transducers

System Attachment

Pressure Zeroing

Elevation Compensation

Battery

0.001 MPa, 0.01 kg/cm² 0.5% of full scale at 25°C; 1% of full scale 55°F to 130°F; 2% of full scale -40°F to 248°F 0 - 700 psia (48.3 bar) Tolerable pressure without internal damage 1000 psia Tolerable pressure without loss of seal 1500 psia Sensing element: -40°F to 266°F (-40°C to 130°C) Max Cord temp: 176°F (80°C); Max Clamp Temp: 203°F (95°C) 0.1°F or °C ±0.2°C (±0.36°F) -4°F to 160°F (-20°C to 71°C) -4°F to 160°F (-20°C to 71°C) 0-95% RH (non-condensing) IP 50 10+ hours continuous 70-90 ft. (Class 1) or 30-40 ft. (Class 2) in most cases (varies depending on the Bluetooth capability of smart device used). Under perfect conditions (clear line of sight and low interference) communications can extend up to 300 feet. Class 1 Bluetooth 2.1 Radio 6" long x 1.6" wide x 2.3" thick (15.3 x 4 x 5.8 cm) 0.5 lbs (225 grams) Automatically calculated by the ManTooth App Displays and records the max and min pressures 98 NIST refrigerant profiles included; upgradeable Save pressure and tem perature readings from your sessions which can be automatically organized by location and serviced unit Capable of measuring 2 temperatures using high accuracy NTC thermistors 67001/67003 - one 67002 - two

Very small internal volume minimizes refrigerant loss during system analysis.

Simple single button zeroing at the start of each session

Enter at start of session for

effortless psia compensation

Rechargeable LiPo battery

Bluetooth







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