# **YJACK™ Series Wireless Probes**



# YJACK™ FOR MORE CONNECTED TECHS.

The YJACK™ Series is a network of devices that form a new platform offering a total HVAC/R diagnostics solution. Multiple devices can measure system and environmental parameters, providing a complete picture of a system's condition.

Each device utilizes Low Energy Bluetooth® (BLE) technology to interconnect with each other and any smart device, Android™ or iOS. Many of the YJACK<sup>™</sup> Series devices can also communicate directly with the P51-870 TITAN® Digital Manifold simultaneously.



### YJACK PRESS™ PRESSURE GAUGE NEW

- Wireless system pressure measurement up to 725 psig (50 bar)
- 45° x 1/4" quick-coupler fitting for versatile system attachment



- Integrated charging port to easily adjust refrigerant charge
- Measures system pressure without losing refrigerant (no hoses and manifolds necessary)
- Working Pressure: -14.7 to 725 psig (-1.01 to 50 bar gauge)
- Pressure Sensor Accuracy: 0.5% full scale at 77°F (25°C), 1.8% full scale from 0°F to 130°F (-18°C to 85°C)
- 300+ hour battery life (2x AAA included)

### YJACK VAC™ VACUUM GAUGE NEW

Wireless system vacuum measurement from atmospheric pressure to 1 micron



- Robust sensor resists pressure shock and oil contamination
- 45° x 1/4" quick coupler fitting for versatile system attachment
- Electronic paper display for clear visibility even in direct sunlight
- Proof Pressure: 450 psi (31 bar)
- Vacuum Reading Range: 1 to 760,000 microns with the YJACK VIEW<sup>™</sup> App (1 to 99,999 microns on integrated display)
- Accuracy: +/- 20% of reading (from 10 to 25,000 microns)
- Up to 240 hour battery life with power saving mode (2x AAA included)

### YJACK PATH™ RANGE EXTENDER

Connects and re-broadcasts up to (6) YJACK<sup>™</sup> devices and (2) P51-870 TITAN® devices at one time



- Adds up to an additional 400 ft signal range to all YJACK™ and P51-870 TITAN® devices\*
- Amplifies signal strength through difficult to penetrate barriers
- Use to circumvent obstructions to your Bluetooth® signal
- Create a signal perimeter with multiple YJACK PATH™ devices to drastically increase line of sight range
- 75 hour continous duty battery life (2x AAA included)

### YJACK DEW™ PSYCHROMETER

Measures percent relative humidity, dry bulb temperature, wet bulb temperature and dew point temperature



- Measures enthalpy change across evaporator coil for system operational efficiency
- Features 8" flexible steel wand for optimal sensor positioning within ventilation ducting
- Optimized sensor housing designed for increased air exchange and better response time
- Relative Humidity Measurement Range: 0 to 100% RH
- Relative Humidity Accuracy: +/- 2.0 % RH TYP (10 to 90 %RH)\*\*
- Temperature Measurement Range: -40°F to 257°F (-40°C to 125°C)
- Temperature Measurement Accuracy: +/- 0.2 °C TYP (-10°C to 80°C)\*\*
- 1500 hour battery life (2x AAA included)

### YJACK AMP™ CURRENT PROBE NEW

- Wireless current measurement up of 50 Amps AC
- 1.2" jaw opening
- Current Sensor Accuracy: +/-1% of reading or +/- 0.15 Amps (whichever is greater)
- Maximum Voltage: 660V
- Measures inrush current to analyze hard starts and troubleshoot blown fuses
- Flexible spiral cable and compact clamp body for easy access in difficult to reach areas
- 600 hour battery life (2x AAA included)

### YJACK™ TEMPERATURE CLAMP

- Measures surface temperature of pipes up to 1.25" diameter
- Temperature clamp provides strong. secure connection to system
- Flexible cable connection for easy access in difficult to reach areas
- Temperature Measurement Range: -40°F to 176°F (-40°C to 80°C)
- Temperature Measurement Accuracy: +/-1.0 °C TYP\*\*
- 1200 hour battery life (2x AAA included)

### YJACK™ TEMPERATURE STRAP

- Measures surface temperature of pipes up to 6" diameter
- Elastic strap creates secure connection and prevents loosening under vibration
- Quick-release latch for rapid connection and disconnection
- Flexible cable for easy access in difficult to reach areas
- Temperature Measurement Range: -40°F to 176°F (-40°C to 80°C)
- Temperature Measurement Accuracy: +/-1.5 °C TYP\*\*
- 1200 hour battery life (2x AAA included)

### YJACK™ SERIES OVERALL FEATURES:

- Compatible with YJACK VIEW<sup>™</sup> App and P51-870 TITAN<sup>®</sup> devices (firmware version v3.0 or later) [YJACK PRESS™ not compatible with P51-870 TITAN®]
- Bluetooth® 4.2 compliant low energy radio
- 400 ft line of sight signal range\*
- Rapid response time
- Rotating mounting magnet for optimal Bluetooth® transmitter placement [not available on YJACK PRESS™ and YJACK VAC™]
- Operating Temperature: -0.4°F to 131°F (-18°C to 55°C): IYJACK VAC™ is 32°F to 104°F (0°C to 40°C)]
- Storage Temperature: -40°F to 122°F (-40°C to 50°C); [YJACK PRESS™: -40°F to 130°F (-40°C to 55°C)]; [YJACK VAC™: -4°F to 122°F (-20°C to 50°C)]; [YJACK AMP™: -22°F to 130°F (-30°C to 55°C)]
- IP52 rated
- 2-vear warranty





<sup>\*</sup>Radio interference and nearby obstructions may reduce signal strength

<sup>\*\*</sup>Results may vary with ambient conditions



The YELLOW JACKET® YJACK VIEW™ App provides seamless integration with YJACK™ and P51-870 TITAN® devices offering a complete HVAC/R system diagnostic solution. Just use your YJACK™ and P51-870 TITAN® devices with your smart phone for complete system analysis.

Easily receive and analyze live data from all powered on nearby YJACK™ and P51-870 TITAN® devices including system pressure, temperature, vacuum, psychometrics and current draw. Includes a variety of session types useful for diagnosing any HVAC/R system.

### YJACK VIEW™ SMART APPLICATION:

- Measure HVAC/R system pressure, temperature, saturation temperature, superheat and subcooling
- Monitor system evacuation status
- Check indoor air comfort and system efficiency with psychromeric air calculations: percent relative humidity, dry bulb, wet bulb and dew point temperature measurements
- Perform system leak tests and track pressure change over time
- Measure system charge with scale weight readings during charging and recovery operations
- Take electrical current measurements and analyze critical system power information
- Generate highly customized and detailed service reports capturing system readings and equipment information
- Monitor status of all nearby YJACK<sup>™</sup> and P51-870 TITAN<sup>®</sup> devices
- Freely switch between multiple simultaneous sessions without loss of data
- Customize data view for each measurement
- Create data logs to be saved or emailed from your smart device
- Choose from 126 refrigerant profiles found in the REFPROP database
- Available on iOS (version 10 or later) and Android<sup>™</sup> (version 8 or later) smart devices





### YJACK VIEW™ HIGHLIGHTS:

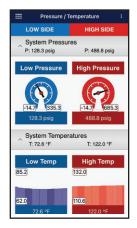
- Effortlessly create and manage a network of connected HVAC/R system diagnostic devices
- Compatible with all YJACK™ and P51-870 TITAN® devices (firmware version v2.0 and later)
- No device connections necessary seamlessly move in and out of range of devices without reconnecting or relaunching application
- Freely navigate between available session types and multiple sessions at one time
- New session types including Psychrometric System Efficiency and Leak Test as well as communication capabilities with YJACK PRESS™, YJACK VAC™, YJACK AMP™ in v3.0 or later
- Easily place and monitor status of all YJACK™ and P51-870 TITAN® devices from one screen
- Adjustable datalog formatting and multiple sampling intervals

### PRESSURE / TEMPERATURE NEW

View system pressure and temperature data as reported by any combination of YJACK PRESS™ devices, temperature devices or P51-870 TITAN® units. Easily select and favorite commonly-used refrigerants for calculating system properties including saturation temperatures and calculated system superheat/subcooling. Effortlessly manipulate data view types, including traditional large numeric format, analog gauge (pressure only) or graphically.

## PSYCHROMETRIC SYSTEM EFFICIENCY NEW

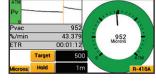
Analyze psychrometric data as reported by (2) YJACK DEW™ devices. Ensure maximum home comfort through wireless supply and return relative humidity, dry bulb, wet bulb, dew point temperatures and enthalpy calculations. Compare system-rated capacity to actual output for overall system efficiency. View available data as traditional large numeric format or graphically.





### **EVACUATION NEW**

Monitor system vacuum as reported by a P51-870 TITAN® external wired vacuum sensor or the YJACK VAC™ Wireless Vacuum Gauge. Data can be displayed as traditional large numeric



format, analog gauge or graphically. Adjustable vacuum pressure target and hold timer ensures all non-condensable gases are removed from the system during evacuation.

### LEAK TEST NEW

Monitor pressure changes during nitrogen leak testing to verify that system is tight. View system pressure trends as traditional large numeric format or graphically.

### **CHARGING & RECOVERY**

Display scale readings from the Wireless Charging Scale (P/N 68864) to accurately charge systems or to determine system charge amount through recovery.

#### **ELECTRICAL NEW**

Electrical session displays readings from YJACK AMP™ Wireless Current Probe while calculating power draw and system Energy Efficiency Ratio (EER).

### **CREATE SERVICE REPORTS NEW**

Service report feature creates highly customizable PDF reports of system measurements and service information while storing past jobs and reports.

### **ENHANCED DATA LOGGING**

Record data from one or all current session types. Choose from a variety of sampling rates depending on user need. Live updates to selected devices, units, elevation and refrigerant selection appended to existing data logs. Start and stop data logging at will — save for later or share via email for remote analysis.







### YJACK™ KITS



YJACK™ Temperature **Clamp Kit** 



YJACK™ Temperature/ **Humidity Kit** 



YJACK™ Charging Kit NEW



YJACK™ Charging & Air Kit NEW



YJACK™ Charging & **Evacuation Kit NEW** 

### YJACK VIEW™ APP SUPPORTED YELLOW JACKET® DEVICES:

- P51-870 TITAN® Digital Manifold
- YJACK PATH<sup>™</sup> Range Extender
- YJACK PRESS<sup>™</sup> Pressure Gauge
- YJACK VAC<sup>™</sup> Vacuum Gauge
- YJACK AMP<sup>™</sup> Current Probe
- YJACK<sup>™</sup> Temperature Clamp
- YJACK<sup>™</sup> Temperature Strap
- YJACK DEW<sup>™</sup> Psychrometer
- Wireless Refrigerant Scale (P/N 68864)

YJACK VIEW™ App Apple/App Store



YJACK VIEW™ App Android™/Google Play





Firmware Updates







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## P51-870 TITAN® DIGITAL MANIFOLD KIT WITH YJACK™ TEMPERATURE CLAMPS

### **40877 KIT INCLUDES:**

- Vacuum sensor (P/N 67030)
- Set of (6) 60" manifold hoses:
  - (3) RYB compact ball valves (P/N 29985)
  - (1) Y 3/8" str x 3/8" 45° (P/N 18160)
  - (2) Compact ball valve 1/4" x 5/16" (P/N 29425 and 29465)
- (2) YJACK<sup>™</sup> Temperature Clamps (P/N 67061)
- USB charging cable
- Backpack carrying case (P/N 10146)



UPC#	Description
67060	YJACK PATH™
67061	YJACK™ Temperature Clamp
67062	YJACK™ Temperature Strap
67063	YJACK DEW™ Psychrometer
67065	YJACK PRESS™ Pressure Gauge <b>NEW</b>
67066	YJACK VAC™ Vacuum Gauge <b>NEW</b>
67067	YJACK AMP <sup>™</sup> Current Probe <b>NEW</b>
67070	YJACK™ Temperature Clamp Kit: (2) YJACK™ Temperature Clamps, (1) YJACK PATH™
67071	YJACK <sup>™</sup> Temperature/Humidity Kit: (2) YJACK <sup>™</sup> Temperature Clamps, (2) YJACK DEW <sup>™</sup> Psychrometers, (1) YJACK PATH <sup>™</sup>
67072	YJACK <sup>™</sup> Charging Kit: (2) YJACK PRESS <sup>™</sup> Pressure Gauges, (2) YJACK <sup>™</sup> Temperature Clamps <b>NEW</b>
67073	YJACK <sup>™</sup> Charging & Air Kit: (2) YJACK PRESS <sup>™</sup> Pressure Gauges, (2) YJACK <sup>™</sup> Temperature Clamps, (2) YJACK DEW <sup>™</sup> Psychrometers <b>NEW</b>
67074	YJACK™ Charging & Evacuation Kit: (2) YJACK PRESS™ Pressure Gauges, (2) YJACK™ Temperature Clamps, (1) YJACK VAC™ Vacuum Gauge <b>NEW</b>
40877	P51-870 TITAN® Digital Manifold with (2) YJACK™ Temperature Clamps, Ball Valve and 5/16" Hoses