

# JF-1A-HH-ST Handheld Stick Conductivity Meter

#### Conductivity Measurement of Distillate Fuels

ASTM D2624; IP 274; DEF STAN 91-91; ASTM D1655; ISO 6297



- JF-1A-ST is Specified in ASTM D2624
- Precise Measurement of Fuel Conductivity & Temperature
- Standard Range 0-2,000 pS/m
- Portable Operation: Replaceable AAA Batteries



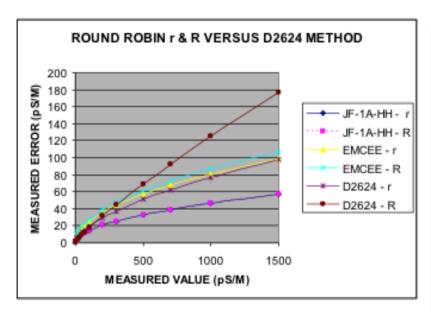


Typical Specifications	
Accuracy:	Listed in ASTM D2624
Measurement Range:	0-2,000 pS/m
Temperature:	-30°C to 50°C
Operational	
Temperature:	-30°C to 50°C
Storage Temperature:	-35°C to 60°C
Temperature Accuracy:	+/- 0.5°C
Resolution:	0.1 pS/m and 0.1°C
Data Output:	IRD Data IN/OUT
	316 SS/PEEK/VITON Patented AC
Sensor Tip:	Technology

## Advantages of the JF-1A-ST Stick Handheld...

- 1. Ergonomic and rugged: easy to use one button tough design; perfect for use in harsh environments even with thick gloves on.
- 2. ASTM D2624 equivalent by ASTM D6708.
- 3. ASTM D2624 highest available accuracy due to AC Measurement Technology.
- 4. Provides digital reading of conductivity, and temperature of sample. Values toggle on display for 30 seconds after sample is taken.
- 5. AC Measurement technology allows for measurement of conductivity in any sample container, no need to relax fuel.
- 6. Long Battery life due to low power consumption and auto power off function. AAA Batteries can be bought locally and replaced easily.
- 7. Custom measurement ranges available consult D-2 for options.
- 8. Same sensor tip technology as our JF-1A-HH handhelds and JF-1A In Line sensors.
- 9. Lifetime support from D-2 Inc, including a one-year limited warranty on the equipment. We are here to provide support and offer expertise on the readings you are getting in the field.
- 10. -30° C to 50°C temperature range allowing a wide range of user measurement locations.
- 11. Field calibration obtained via IRD data link, no need to open the unit.
- 12. Full validation/calibration can be obtained via USB driven simulator or standalone device. Both available from the factory. Standard range only, at this time.







# D-2 Conductivity Sensors use our Patented AC Measurement technology rather than DC Measurement technology, here is why:

The D-2 Stick conductivity AC measurement sensor (JF-1A-ST) offers improved accuracy and easier operator use. AC measurement is more accurate than the competition due to the elimination of DC measurement errors. A DC sensor never reaches measurement equilibrium, hence, the need to estimate an answer based on a time interval of measure. The application of a DC voltage forms a battery between the two electrodes of the sensor, at first a large 'in-rush current occurs, the current then slows as polarization voltage builds on the two measurement electrodes, in the end zero current flows as the charges on the electrodes has formed an infinite impedance. So, a DC sensor must guess when the current flow is representative of the fluid ability to conduct, any flow or changes in temperature dramatically affect this time dependent measure. In our AC (Patented) measure the voltage is continuously varying from one electrode to the other, no polarization occurs and the measure is flow insensitive, as we can make many measures over any number of cycles, we can obtain very high precision.

The Stick conductivity is one of the most easy, accurate, and durable industry designs for taking conductivity and temperature of fuel in the field. This makes the Stick Conductivity handheld ideal for any fuel kit applications across the fuel industry. The small diameter allows the sensor to measure directly in standard one liter fuel sampling containers. This feature means no need for fuel transfer to a separate beaker, minimizing the possibility of contaminating the measurement.

To see how a DC Meter compares to our AC Handheld, please see Graph from ASTM Research Report RR-D02-1680 Above.



#### JF-1A-ST Stick Handheld Conductivity Images



JF-1A-ST-VC (-USB) or (-SEF)

Full validation/calibration can be obtained via USB (-USB) driven simulator or standalone device (-SEF). Both available from the factory. Standard range only, at this time. Pictured is the USB Version.



#### Digital Output in pS/m for Conductivity

The stick handheld outputs the conductivity reading automatically on the internal naturally bright OLED screen, as shown in this image displaying the value, screen can be read from full darkness to bright sunlight.



#### Digital Output in Celsius for Temperature

Built in precise fully digital temperature sensor. Provides accurate temperature which is important as conductivity is a function of temperature.



#### Field Proven Highly Durable Technology

The Stick Handheld uses the same technology as our field proven and tested JF-1A-HH handhelds, which are the most accurate technology in the industry. We took that technology and made it even more durable and compact



#### **Proudly Made In America**

All D-2 Inc. Products are made right here in the USA. We offer direct support for our products.



Description	Certifications
	ASTM
	D2624
Standard Handheld Stick Conductivity Meter 0-2,000 pS/m (With Case)	Equivalent
Stick Conductivity Calibrator, Validation Unit, USB Version & USB Cable &	
Software	
Stick Conductivity Calibrator, Validation Unit Self-Contained, Univ. Power	
Supply	
Stick Conductivity Replacement Batteries	
Stick Conductivity Belt Holder	
Stick Conductivity Carry Case (Holds Sensor & Calibrator, USB Cable)	
	Standard Handheld Stick Conductivity Meter 0-2,000 pS/m (With Case) Stick Conductivity Calibrator, Validation Unit, USB Version & USB Cable & Software Stick Conductivity Calibrator, Validation Unit Self-Contained, Univ. Power Supply Stick Conductivity Replacement Batteries