



PSD90-3

AC/DC Fuel Quantity Test Set

Capacitance Measurement Modes

AC

DC

OEM DC

Capacitance Measurement

Range	0.000 pF – 39,999 pF
Accuracy	Greater of $\pm 0.1\%$ of reading or ± 0.05 pF
Range (pF)	Resolution (pF)
0.000 – 39.999 (Manual Range only)	0.001
0.00 – 399.99	0.01
400.0 – 3,999.9	0.1
4,000 – 3,999,939,999 (AC and DC only)	1

Capacitance Simulation

Accuracy	Greater of $\pm 0.2\%$ of reading or ± 0.1 pF
	From 300 Hz to 10,000 Hz
Simulation Range (pF)	Resolution (pF)
TU	
0.00 – 399.99	0.01
400.0 – 3,999.9 (AC or DC)	0.1
400.0 – 1,999.9 (OEM DC)	0.1
4,000 – 11,500 (AC or DC)	1
COMP (AC)	
0.00 – 399.99	0.01
400.0 – 1,150	0.1
AUX	
0.00 – 399.99	0.01
400.0 – 3,999.9 (AC or DC)	0.1
400.0 – 1,999.9 (OEM DC)	0.1
4,000 – 11,500 (AC or DC)	1

Resistance Measurement	
Accuracy	Greater of $\pm 2\%$ of reading or 0.05Ω $\pm 5\%$ of reading in manual ranges and Extended Meg range
Measurement Range (Ω)	Resolution (Ω)
0.000 – 39.999 (AC and DC only)	0.001
0.000 – 399.99	0.01
400.0 – 3,999.9	0.1
4.000 K – 39.999 K	0.001 K
40.00 K – 399.99 K	0.01 K
400.0 K – 3,999.9 K	0.1 K
4.000 M – 39.999 M	0.001 M
40.00 M – 399.99 M	0.01 M
400.0 M – 3,999.9 M	0.1 M
4,000 M – 19,999 M	1 M
0.0000 nS – 3.9999 nS (Manual Range only)	0.0001 nS
DTF (Distance to Fault) Measurement	
Range	0 pF – 39,999 pF
Accuracy	$\pm 0.1\%$ of reading ± 1 pF
Resolution	1 pF – 1 range
Voltage Measurement	
Range	-33.999 V – +33.999 VDC
Accuracy	Greater of $\pm 0.2\%$ of reading or ± 2 mV
Resolution	0.001 V – 1 range
Impedance	1.0 M Ω
Environmental	
Operating temperature	-40°C to +55°C
Storage temperature	-51°C to +71°C
Power Requirements	
Battery	1 Rechargeable 12 V Lead Acid Gel Cell
Operation	12 hours minimum from -10°C to +50°C (Lower operation time beyond these temperatures)
Charge Time	8 hours max from fully discharged battery
Charge Input	100 – 240 VAC from 45 – 60 Hz 100 – 130 VAC from 380 – 440 Hz
Charge Temp	-20°C to +50°C (Charger will operate unit beyond these temperatures but will not charge battery)

Physical Characteristics	
Height	10.6" (26.9 cm)
Width	14" (35.6 cm)
Depth	6.5" (16.5 cm)
Weight	13 lbs (5.9 kg)
Test Set Certifications	
Altitude, operating	MIL-PRF-28800F, Class 2
Altitude, not operating	MIL-PRF-28800F, Class 2
Bench Handling	MIL-PRF-28800F, Class 2
Blowing Dust	MIL-STD-810F, Method 510.4, Procedure I
Drip proof	MIL-PRF-28800F, Class 2
Explosive Atmosphere	MIL-STD-810F, Method 510.4, Procedure I
Relative Humidity	MIL-PRF-28800F, Class 2
Shock, Functional	MIL-PRF-28800F, Class 2
Auto and manual ranging	MIL-PRF-28800F, Class 2
Vibration Limits	MIL-PRF-28800F, Class 2
Temp, operating	MIL-PRF-28800F, Class 2
Temp, not operating	MIL-PRF-28800F, Class 2
Transit-Drop	MIL-PRF-28800F, Class 2
Safety Compliance	UL-61010B-1, EN-61010-1, CSA 22.2 No 61010-111
EMC	EN-61326
Features	
True closed-box calibration	
Auto and manual ranging	
Fully remote controllable via RS-232	
Backlit display	
CE certified	
Meets safety requirements of Boeing 10-61959 specification	
Self-Test on Power up	
DTF function displayed in capacitance	



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