



LIQUID MEASUREMENT SYSTEMS

FUEL GAUGING PROBES

OVERVIEW

Liquid Measurement System's capacitance AC and DC fuel gauging probes use lightweight and durable carbon composite materials. In addition to being some of the lightest fuel probes in the industry, they are also virtually immune to corrosion, cracking, dents, and extreme field conditions. Our capacitance probes are inherently crash resistance by collapsing onto itself during hard impact landings to avoid tank penetration and fuel leaks. All electrical connections on the probe, are bonded. There is no friction or riveted electrical connections.

FEATURES

- No support equipment required *(when coupled with LMS signal conditioners)*
- Robust composite two-tube design
- Will not dent, scratch, or absorb hand oils
- No friction or cracking under high vibration or slosh loads
- Weight savings in comparison to steel or aluminum probes
- Resistant to cracking or material fatigue
- No friction or riveted electrical connections
- Flange mounted or internal bracket mount
- Optional Compensator capability

FEATURES: AC SPECIFIC

- No electrical components on probe
- Optional point sensor capability (High/Low Level)
- Optional fuel density compensation
- Polymer end-caps

FEATURES: DC SPECIFIC

- Compatible with 200v/m EMI environment
- Outer-tube grounded to the airframe providing Faraday-cage shield
- Standard fuel density compensation
- Low cabling complexity
- Nickel plated end-caps

INPUT / OUTPUT

- Lo-Z Excitation and Hi-Z Response
- (DC Probes) Ground

OPERATIONAL TEMPERATURE

- -55°C to +75°C

SYSTEM ACCURACY

- Standard unit: JSSG-200A Class I ($\pm 4\%$ indication, $\pm 2\%$ full scale) when paired with LMS Signal Conditioner Unit. Class II or III accuracy per customer requirement.



LIGHT

SAFE

ACCURATE

BEST VALUE

LMS

LIQUID MEASUREMENT SYSTEMS, INC.
FUEL PROBES • CONDITIONERS • FUEL INDICATORS • REFUEL PANELS
www.liquidmeasurement.com

+1.802.528.8100

Adam.Truso@liquidmeasurement.com



LIQUID MEASUREMENT SYSTEMS

FUEL GAUGING PROBES

DO-160G Section and Description		Category
1	Temperature & Altitude	B2
2	Temperature Variation	B
3	Humidity	A
4	Operational Shocks and Crash Safety	B
5	Vibration	S (Curve T) R (Curve G)
6	Explosive Atmosphere	E
7	Waterproofness	W
8	Fluids Susceptibility	F
9	Sand and Dust	S
10	Fungus Resistance	F
11	Salt Fog	S
12	Magnetic Effect	Y
13	Power Input	ZXX
14	Voltage Spike	A
15	Audio Frequency Conducted Susceptibility	Z
16	Induced Signal Susceptibility	ZCX
17	Radio Frequency Susceptibility (Radiated and Conducted)	R
18	Emission of Radio Frequency Energy	M
19	Lightning Induced Transient Susceptibility	A3J3L3
20	Lightning Direct Effects	X
21	Icing	A
22	Electrostatic Discharge (ESD)	A
23	Fire, Flammability	C

