



**KAM® LRW™**  
Low Range Watercut meter

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The KAM® LRW™ uses AnyDensity™ technology to automatically compensate\* for changes in density across the entire range of API gravities.

#### KEY FEATURES

- Patented microwave resonance technology
- AnyDensity™ density compensation for full API gravity range\*
- Automatic temperature correction
- Highest accuracy available:  $\pm 0.03\%$
- Spool and insertable models available for maximum installation flexibility
- Local display
- All parts and assembly made in the USA

A superior option to traditional BS&W technologies, the patented KAM® LRW™ Low Range Watercut meter offers the high accuracy and repeatability of microwave measurement in a package specifically designed for custody transfer and other low range applications.

Unique to the LRW™, AnyDensity™ technology allows the instrument to compensate for any change in density across the entire API gravity range.\* This is paramount in situations where a single truck or rail unloading site could see swings in API gravity from the 20's to the 60's.

The patented and proven microwave technology used in the LRW™ provides industry-leading accuracy – as low as  $\pm 0.03\%$  on 0-3% models. And high quality components made and assembled entirely in the USA provide reliable and consistent performance for long-term use. Plus the unit can easily be calibrated in line.

With insertable and spool/flow through models, the LRW™ also offers installation flexibility that no other unit can match. Spools can be custom fabricated for lines 1-4" and lengths 21" and above. Spools also incorporate static mixing elements to ensure a homogenous flow and manual draw-off valves key for calibration and verification. And fixed-insertion models only require enough vertical pipe for a 1.25" NPT or flanged process connection, saving valuable vertical space on LACT units.

\* requires density input



**Flow through spool model:**

2", 3" or 4" flanged flow through spool  
Includes static mixer and manual draw-off valve  
Standard spool length is 32" (812 mm)  
Minimum spool length is 21" (533 mm)



**Fixed insertion model:**

1.25" NPT or  
2", 3", or 4" flange connection  
For pipelines 3" or greater

Also available:

**Insertable/retractable model:**

2" MNPT; 2", 3", or 4" flanged seal housing

**SPECIFICATIONS**

Media:	Crude oil and refined products
Wetted parts:	316 SS, hastelloy, & PEEK (Other materials available)
Fluid temp:	T <sub>o</sub> 176° F (80° C)
Electronics temp:	-4° F to 131° F (-20° C to +55° C)
Power requirements:	24 VDC
Power consumption:	12 watts
Available ranges:	0-3%, 0-5%, 0-10%
Accuracy:	+/- 0.03% up to 3% water +/- 0.05% from 3-5% water +/- 0.1% from 5-10% water
Repeatability:	+/- 0.01%
Resolution:	+/- 0.01%
Minimum water detection:	100 ppm
Outputs/serial ports:	4-20 mA Alarm relay RS232 ASCII RS485 Modbus
Density Correction:	AnyDensity <sup>™</sup> compensates for changes in fluid density across entire API gravity range (requires density input )
Temperature Correction:	Automatic
Pressure ratings:	ANSI 150, 300, 600, 900
Flow conditions:	Well mixed in accordance with API MPMS Chapter 8.2

**FOR MORE INFORMATION ON KAM PRODUCTS**

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