



**KAM® ATD™**  
Automatic Tank Dewatering

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Ex db IIB T6 Gb



The unique solid-antenna design of the KAM® ATD™ prevents the build up of paraffin, tank sludge, etc. on the antenna, requiring far less maintenance and providing far more accurate measurement.

#### APPLICATIONS

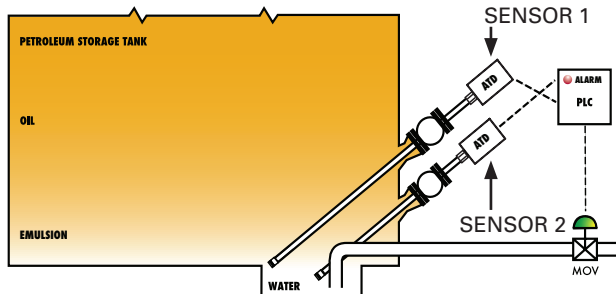
- Automatic tank dewatering
- In tank or draw-off line installations
- Desalter optimization
- Oil skimming

The build up of water levels in hydrocarbon storage tanks is an unfortunate and expensive inevitability, reducing storage capacity and corroding tank interiors. Manually discharging accumulated water potentially results in the loss of some hydrocarbons through the draw-off line, adding significant cost and environmental liabilities to storage.

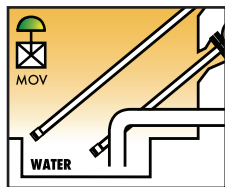
The KAM ATD Automated Tank Dewatering system eliminates the loss of hydrocarbons in the water draw-off line while bringing repeatability, safety, and efficiency to the operation.

#### KEY FEATURES

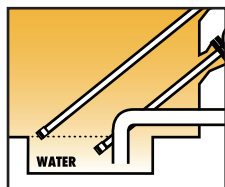
- Microwave technology
- Installs without the need to drain the tank
- All requisite electronics housed within unit and included in unit price
- Solid-antenna design prevents tank debris from clogging probe
- Maintains accuracy in emulsions and in both water-continuous and oil-continuous phases, automatically detecting the change from phase to phase



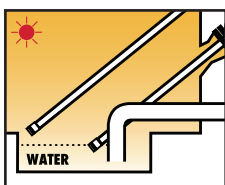
Two KAM<sup>®</sup> ATD sensors are inserted at an angle directly into the tank or from the top through full-opening ball valves.



ATD Sensor 1 monitors water concentrations at or near the bottom of the tank. When water concentrations reach 100%, Sensor 1 triggers the opening of the MOV on the water draw-off line.



The emulsion layer will descend as water is drained from the bottom of the tank. When Sensor 1 detects a predetermined level of hydrocarbon, it will trigger the closing of the MOV on the draw-off line. Because the sensor is well above the entrance to the draw-off line, no oil emulsion ever drains from the tank.



In the rare case that Sensor 1 fails to trigger the closing of the MOV, Sensor 2 will trigger both an alarm and the closing of the MOV. Again, because the sensor is still above the entrance to the draw off line, no oil emulsion ever drains from the tank.

## SPECIFICATIONS

Media:	Crude oil, refined products and chemicals
Material:	Wetted parts - 316 stainless steel
Fluid temperature:	-40° to 176°F (-40° to 80°C)
Power requirements:	24 VDC/1 amp at 24 watts
Accuracy:	±5%
Repeatability:	±0.05%
Resolution:	±0.01%
Outputs:	Selectable 4–20 mA with adjustable range or 0–5 VDC Digital Out - 24 V max RS232/RS485
Mounting:	2" MNPT seal housing 2", 3", or 4" flanged seal housing
Pressure ratings:	ANSI 150, 300, 600, 900, 1500
Hazardous areas:	ATEX II 2 G Ex d IIB T6 NEMA4 (IP66 equivalent)
Sensor dimensions:	Ø1.5" x 1.5" (38 mm x 38 mm)
EX enclosures:	4.6" x 7.1" x 4.4" (117 mm x 180 mm x 112 mm)
Shaft length:	Per user specification

### FOR MORE INFORMATION ON KAM PRODUCTS

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