

Moisture in oil

Detect small moisture increases from condensation or larger free water breakout.

The standard industrial EASZ-1 is an online instrument that accurately reports water content in any oil or fuel. One of the technical advantages is an inherent ability to detect the presence of moisture in ppm or free water as a percentage. This means that users can capture real time data on dissolved, emulsified and free water.

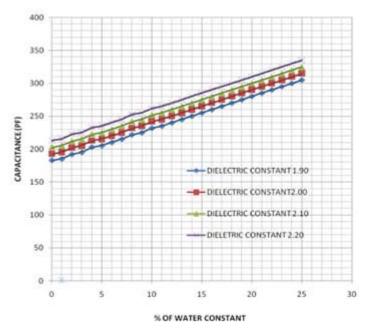


Free water in oil

The EASZ-1 response time is 1 second. This means that it not only capable of responding to a moisture increase over time but also a bigger problem of free water breakout.

The EASZ-1 measurement principle is based on the knowledge that water and liquid hydrocarbons (or hydrocarbon based liquids) exhibit very different dielectric constants to water. The differences are so large, that even a very small increase in water content can be picked up by the sensors as a significant change in the permittivity.

The EASZ-1 electronics accurately measure these changes and report the water values through an analog output, RS-232 or through its built in HART® modem.



The EASZ-1's ability to measure water in real time and express it in either a ppm or percentage allows the instrument to be installed in a wide range of applications in general industries. The instrument can also be manufactured and certified for use in hazardous areas for oil and gas, chemical and pharmaceutical applications.

## **DIELECTRIC CONSTANT METER**

Online DC measurements can also be employed in certain applications where a change of state is being monitored but may require custom software programming



## **INDUSTRIES SERVED**



Oil and Gas - Marine



Power Plant - Power Production



Petrochemical, Chemical and Pharmaceutical



Tank Farms - Oil Terminals - Truck Unloading

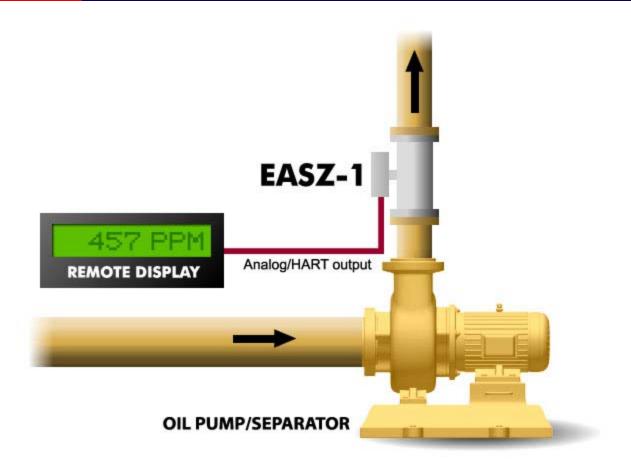


Lubrication Industry



Crude Oil Export Metering Stations











## EMC, HAZARDOUS AREA CERTIFICATION AND THE PRESSURE EQUIPMENT DIRECTIVE.

ATEX CERTIFIED IECEx Certified CSA/US certified Gost Certificate EUROPEAN PED MODULE H
COMPLIANCE





















The EASZ-1 can be manufactured for use in typical non-hazardous environments and hazardous area applications. Some countries have additional local certification requirements, which not only include hazardous area certification but also further electronic testing. Be sure to discuss your requirements with EESIFLO or our local representative to make sure that your requirements are met by us.





## The EASZ-1 can be manufactured in several different materials and connection types. Please request EESIFLO to send you an INSTRUMENT DATA SHEET if your requirements are non-standard.

Power Requirements	Loop Powered 12/24 vdc
Electronic Housing Protection	IP66
Electronic Housing Material	Stainless Steel
Electronic Housing Temperature range	Range -40 °F -185 °F (-40 °C to 85 °C)
Electrical Compliance	1/ optional 2*
Output	4-20 mA DC/ RS 232 Full Duplex /HART
Display Options	Remote HI/LOW alarm
Connections	NPT/BSP/JIS/DIN/ANSI or special connectors
Data Retrieval	EASZ-1 GUI software for Windows and HART
Available Sizes	1 inch to 48 inches
Installation	Inline or Bypass
Water in Oil/Fuel Range	User Selectable e.g 0-1%, 0-25% Optional 0-100%
Sensor Resolution	+/- 30 ppm
Sensor Body Construction Material	All 316 Stainless Steel (standard) Optional Duplex/Monel/Hastelloy C
Temperature Compensation	Built in Temperature sensor
Minimum Recommended Flow Velocity	0-15 m/s
Spacer Material	(PEEK ) Poly Ether Ketone
Standard Pressure Rating	16 Bar/230 psi (higher pressure ratings consult factory)