

# Digital Oil Sensor Series

## CS6900HD



## Review

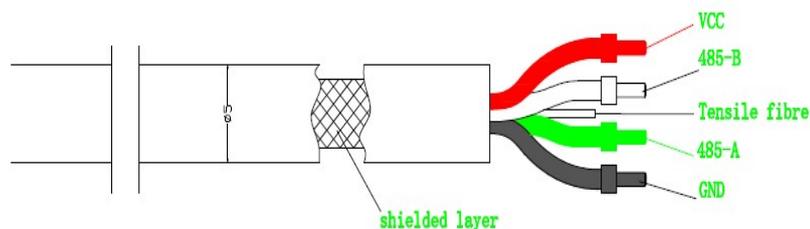
Commonly used oil-in-water detection methods include suspension method ( $D/ \leq 1$ ), infrared spectrophotometry (not suitable for low range), ultraviolet spectrophotometry (not suitable for high range), etc. The online oil-in-water sensor adopts the principle of fluorescence method. Compared with several commonly used methods, the fluorescence method is more efficient, quicker and more reproducible, and can be monitored online in real time. The sensor has better repeatability and stability. With an automatic cleaning brush, it can eliminate air bubbles and reduce the impact of contamination on the measurement, making the maintenance cycle longer, and maintaining excellent stability during long-term online use. It can act as an early warning to the pollution of oil in water.

The ultraviolet fluorescence method is used to monitor the oil content in the water body, and the oil concentration in the water body is quantitatively analyzed based on the fluorescence intensity emitted by the petroleum and its aromatic hydrocarbon compounds and compounds containing conjugated double bonds after absorbing ultraviolet light. Aromatic hydrocarbons in petroleum can produce fluorescence under the excitation of ultraviolet light, and the value of oil in water can be calculated according to the intensity of fluorescence.

## Features

Digital sensor, MODBUS RS-485 output,  
With automatic cleaning brush to eliminate the influence of greasy dirt on the measurement.  
Unique optical and electronic filtering technology, not affected by suspended particles in water

## Wiring



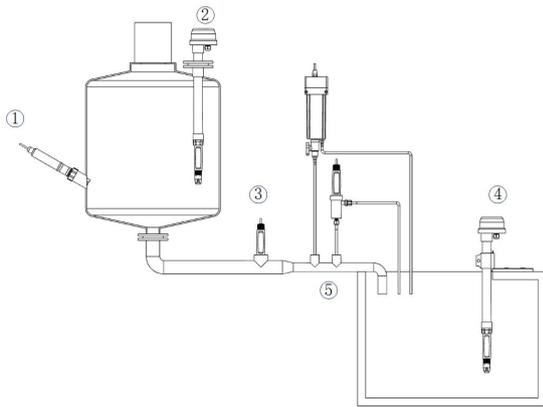


Waterproof IP68

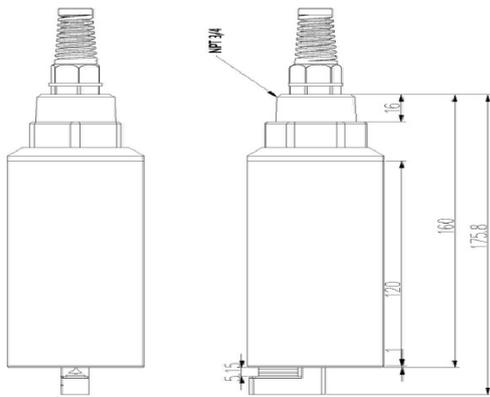


Adopt PTFE large ring diaphragm, long life time

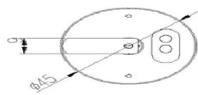
## Installation



(Common electrode installation)



(Overall dimension drawing)



## CS6900HD Digital Oil Sensor

<b>Model No.</b>	<b>CS6900HD</b>
<b>Power/Outlet</b>	5~12VDC/RS485 MODBUS RTU
<b>Measure Principle</b>	Fluorescence
<b>Dimensions</b>	φ45*175.8mm
<b>Housing material</b>	316L Stainless steel
<b>Waterproof rating</b>	IP68
<b>Measurement range</b>	0-1000ppm
<b>Resolution</b>	0.1ppm
<b>Accuracy</b>	±3% F.S
<b>Pressure resistance</b>	≤0.3Mpa
<b>Measuring Temperature</b>	0-50℃
<b>Calibration</b>	Sample calibration, standard liquid calibration
<b>Cable length</b>	Standard 10m cable, can be extended to 100m
<b>Installation thread</b>	G3/4
<b>Application</b>	General application,river,lake,environmental protection etc.