



# Red Eye<sup>®</sup>

SUBSEA WATER-CUT METER



## Precision Flow Data for Continuous Optimization

Red Eye subsea water-cut meters provide accurate water-content measurements for ideal production monitoring, measurement, and optimization. Designed to handle harsh, ultra-deepwater environments and deliver pinpointed quantifications for all hydrocarbon wells, Red Eye presents a step-change in subsea water-cut detection and is a vital component to virtual metering—creating the industry's first stand-alone subsea water-cut meter and ultimate multiphase-support redundancy.

With its patented, near-infrared (NIR) light-sensing technology, Red Eye water-cut meters measure the full range of water cut in real time—distinguishing water, oil, and hydrate inhibitors—regardless of salinity, solids, H<sub>2</sub>S, CO<sub>2</sub>, emulsions, or impurities. Unlike other water-cut meters, Red Eye requires no corrections for any change in fluid content, creating an affordable solution for monitoring individual or multiple-well assets.

### POWERFUL MULTIPHASE SUPPORT AND SAVINGS

**70% less OPEX and  
60% less CAPEX per well**

**Most sensitive water  
onset detection**

**Near infrared (NIR)  
sensitivity**

SOUTH CASPIAN SEA

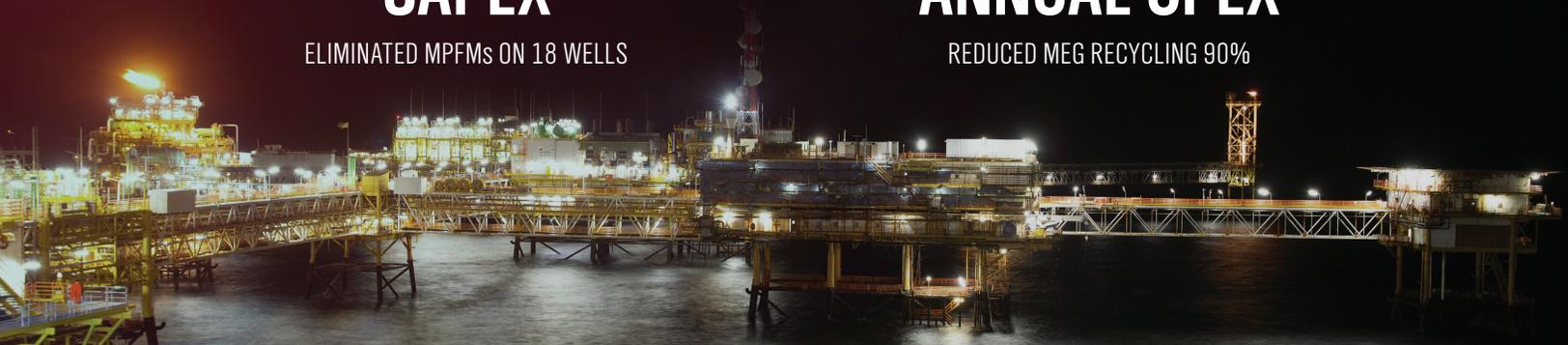
**SAVED \$12M  
CAPEX**

ELIMINATED MPFMs ON 18 WELLS

MEDITERRANEAN SEA

**SAVED \$2M  
ANNUAL OPEX**

REDUCED MEG RECYCLING 90%



# PRODUCE WITH PRECISION

INSTANTLY AND CONTINUOUSLY MEASURE THE FULL RANGE OF WATER CUT



## EMPOWER TRUE RESERVOIR INSIGHT

Instantly and continuously produce the full range of water cut.

### Near infrared (NIR) sensitivity

Instantly distinguish between water, oil, methanol, and glycol in the full range of water cut and full range of GVF—regardless of salinity, chemistry, solids, impurities, H<sub>2</sub>S, CO<sub>2</sub>, emulsions, and polymers.

### In-line water-hydrate inhibitor measurements

Includes water-methanol concentrations that are extremely useful in the optimization of hydrate-injection processes.

### Most sensitive water-onset detection

Integrated optical channel is extremely sensitive, which enables direct measurements within minute concentrations of water.

### Continuous measurement accuracy

Assess reservoir behavior with real-time water-cut monitoring for optimized production strategies, pinpoint reporting, and reduced artificial-lift costs.



## SIMPLIFY AND SPEND LESS

Continuous water-cut accuracy optimizes efficiency, saves operational costs, and reduces seafloor footprint.

**70% less OPEX and 60% less CAPEX per well**  
Multiphase-support redundancy eliminates the need for dedicated topside equipment, frequent human interventions, and onsite calibrations.

### Simplified engineering

Eliminates hand-sampling inconsistencies and intermittent data for improved HSE risks by limiting personnel exposures to high temps, high pressures, and sour gasses.

### SIIS system (Subsea-Instrumentation Interface Standardization)

Provides level-2 or level-3 communications that include onboard raw-data storage with remote firmware support.

### Exclusive installation flexibility

Provides functionality at the wellhead or downstream for individual-or-group well monitoring, testing, and water-breakthrough detection.



## ADVANCE TO PRODUCTION 4.0

End-to-end solutions maximize production, reduce downtime, and enhance personnel efficiency.

### Unprecedented flow intelligence

ForeSite Flow delivers full-range multiphase insight with real-time, split-second accuracy—all without a test separator or a nuclear source.

### End-to-end production solutions

Leverage global expertise and everything needed to diagnose and repair common production issues for all artificial-lift systems.

### Instant subsea digital intelligence

ForeSite<sup>®</sup> Sense provides real-time monitoring data that drives profitability for any well—with any lift, in any environment.

### Enterprise-level optimization

ForeSite production optimization helps maximize performance throughout any well, reservoir, or surface facility.