

# REALology Intelligent Drilling Fluids Monitoring System

REALology Intelligent Drilling Fluids Monitoring System is an advanced system that combines cutting-edge hardware and software to automatically monitor the critical parameters of drilling fluids, including water-based, oil-based, and synthetic-based systems in real-time. Building upon the success of the first-generation REALology, this next-evolution solution delivers enhanced functionality and performance to optimize drilling operations. REALology empowers drilling engineers with comprehensive real-time visibility and control over critical drilling fluid parameters. By enhancing drilling performance and reducing NPT, this intelligent monitoring solution drives improved operational efficiency and profitability.

## FEATURES

- Compact design enables easy deployment even in space-constrained rig environments
- Lightweight design simplifies configuration - just 2 people can complete setup in 1 hour
- IP65 ingress protection and Exdb II BT4 Gb hazardous area certification for offshore applications
- Continuous real-time monitoring of density, temperature, rheology, chlorides and pH
- Modular and customizable design to meet diverse application needs
- Viscosity measurement fully compliant with API standards
- Flexible unit placement for inlet/outlet fluid comparison for enhanced monitoring
- Automated self-cleaning to reduce maintenance requirements
- Intelligent data diagnostics capability identifies potential risks such as contamination and fluid instability
- Extended MTBF (Meantime between failure) up to 45 days for lower operational costs
- Improved field reliability based on 20,000+ hours of proven performance



## KEY BENEFITS

- **Space Saving:** Ideal for space-constrained environments
- **Efficiency Boost:** Faster configuration, simplified maintenance
- **Cost Savings:** Modular design reduces unnecessary expenses
- **Safety Enhancements:** Real-time monitoring alerts downhole accidents

- **Uninterrupted Operations:** Long-term, unmanned monitoring capabilities

MONITORING CAPABILITIES					
600rpm	300rpm	200rpm	100rpm	6rpm	3rpm
Temperature	Density	Chlorides	pH	Plastic Viscosity	Apparent Viscosity
Yield Point	Gels	*Other selections can be installed on request.			