# VERTECHS realology

# REALology Intelligent Drilling Fluids Monitoring System

Vertechs 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.



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#### **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 (Mean Time Between Failure) up to 45 days for lower operational costs
- Improved field reliability based on 20,000+ hours of proven performance



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#### **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

#### **SPECIFICATIONS**

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

#### **Contact Us**

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