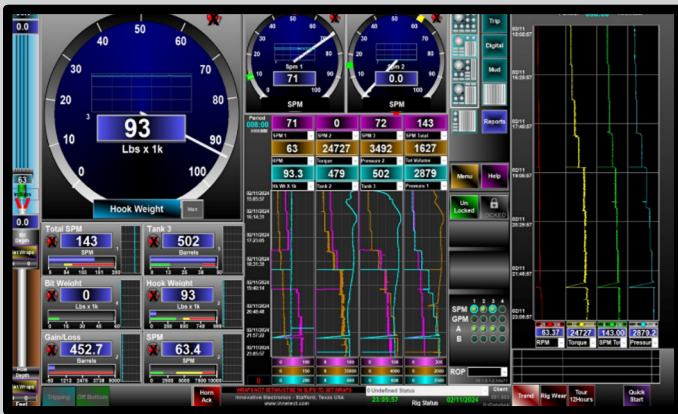


JIACH RIG-PRO Monitoring System

JIACH ENERGY SOLUTIONS has 2 variants in Electronic Drilling Recorder (EDR) Drilling Instrumentation system.

- MATHERNE INSTRUMENTATION, USA developed I-View® Rig Monitoring & Reporting, F.I.R.M.S.® Modular Component
- JIACH ENERGY SOLUTIONS PRIVATE LIMITED, INDIA developed JIACH RIG-PRO Monitoring System

The I-View® Rig Monitoring & Reporting, F.I.R.M.S.® Modular Component is a comprehensive, real-time drilling Instrumentation, data acquisition, monitoring, and reporting solution designed to enhance drilling efficiency, reduce Non-Productive Time (NPT), and enable data-driven decision-making across rig operations.



Key Capabilities

1. Integrated Data Acquisition & Transmission

- The Instrumentation Server collects data from:
 - Advanced Instrumentation System (AIS)
 - Electronic Drilling Recorder (EDR)
 - Mud Logging Units
 - M/LWD systems
 - Cementing Units
 - Rig Engines

Data is transmitted in **WITSML format**, ensuring industry-standard interoperability

2. Driller HMI Touchscreen Interface

- Intuitive touchscreen interface for drillers
- Enables configuration of drilling parameters in real time
- Helps reduce NPT and improves operational efficiency

3. Electronic Drilling Recorder (EDR) System

A highly integrated network consisting of:

- Sensors and instrumentation
- Data acquisition systems
 - Analog Channels-30
 - Digital Channels- 18
- Computers and touchscreen displays



4. Cloud Connectivity & Collaboration

- Secure communication with cloud-based platforms
- Real-time data sharing between onsite and office teams
- Enables remote monitoring, reporting, and decision-making

Rig-Pro System Features

Real-Time Monitoring & Visualization

- Multi-station, multi-screen configurable system
- Displays:
 - Analog & digital gauges
 - Graphs and trends
 - Mimics and alarms

Advanced Data Handling

- Supports MODBUS, WITS0, WITSML and other data sources

- Tracks both real-time and historical data
- Identifies:
 - Flow deviations
 - Pressure anomalies
 - Drilling breaks

Network & Accessibility

- TCP/IP-based system architecture
- Remote access via secure browser-based thin clients
- Enables global access to rig data with internet connectivity

System Reliability & Scalability

- Multiple independent servers
- Self-healing database synchronization between servers
- Continuous monitoring even during network loss

Reporting & Data Logging

- 16-pen electronic reporting system
- Historical data visualization and printing
- Flexible time/date-based analysis

Standalone Configuration

- Full configuration via I-DAQ screens
- No external devices (like laptops) required
- Continuous display of critical variables even if network fails

Industry Standards & Compatibility

- WITS compliant (supports up to 2 users simultaneously)
- Compatible with global drilling data systems