

XDR Xenon is the Operating System at the heart of all XDR 3rd Generation Oilfield Equipment, with an exceptionally high level of functionality. Xenon is designed to increase productivity, reduce non productive time, and simplify troubleshooting of any issue that may arise.



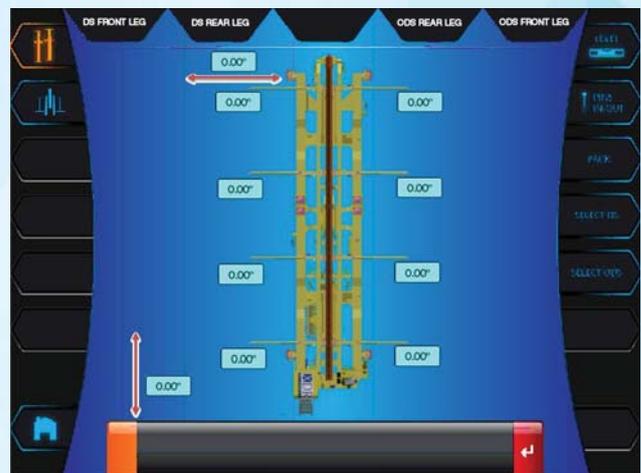
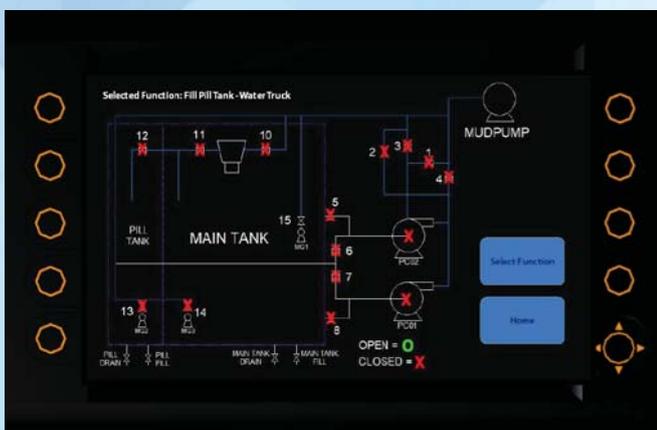
Xenon is fully scalable from the basic version to a fully equipment integrated system package. Xenon has 5 packages to the suite.

1. The Operating System that controls each individual piece of plant.
2. The ability to integrate all the pieces of plant on site. This allows for one person to control the XDR 250 rig, XDR Power Catwalk and the XDR Magazines. It can be configured for one operator to control the Power Catwalk and Magazines.
3. Live telemetry which allows the operating parameters of the XDR 250 Rig to be sent in real time. Internet required.
4. Black Box data recorder which stores 175 data points of the rig parameters for 12 months.
5. Xenon Maintenance. This package monitors critical activities and notifies the relevant party to prepare for maintenance and another alert when it must be carried out.

Under development is Xenon Docs. This package will allow rig managers and drillers to fill in their tour reports, time sheets etc from the hoist HMI and in the site office.

# XDR XENON

RIG TELEMETRY TECHNOLOGY



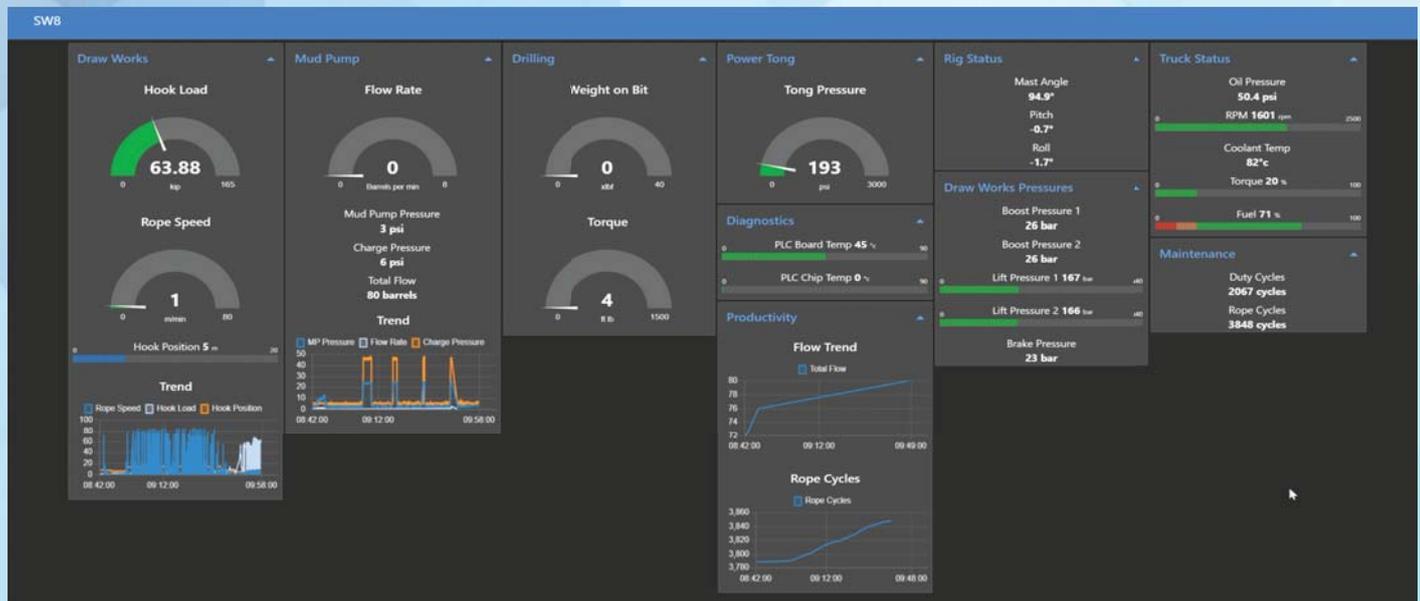
Xenon is fully scalable from the basic version to a fully equipment integrated, live telemetry version providing the following.

- ✎ Drillers HMI - Customisable To Clients Requirements.
- ✎ Site Office Screen
- ✎ User Configured Screens With Passwords
- ✎ Permissive Screens For Fault Finding
- ✎ Pit Volume Totalisation
- ✎ Trending Via Graphs
- ✎ Live Telemetry To Operators and Well Owners
- ✎ Global Remote Access For Technical Support, Requires Internet
- ✎ Built In IADC Tour Reports (under development)
- ✎ Black Box Logging With Up to 175 Data Points
- ✎ Designed To International Standards With SIL Analysis
- ✎ Rig To Rig Communications Allowing One Company Man To Supervise Multiple Rigs.
- ✎ Maintenance requirements/alerts transmitted to relevant department

Available on



XDR Xenon Live Telemetry provides data transmission of wanted parameters to anywhere in the world using an internet connection. Not only does it provide the data on the screen below, additional parameters such as PVT can be added on request.



## Xenon Black Box

XDR Xenon Black Box, tracks upto 175 data points and is capable of storing data for more than 12 months of operation. In the case of an incident, the CSV files can be easily graphed, showing precisely the position of joy sticks, hydraulic pressures, hook loads and much more.

| Date      | Time       | RPM  | DW Speed | Hookload | DW Position | Truck Torque |
|-----------|------------|------|----------|----------|-------------|--------------|
| 7/19/2019 | 9:55:45 AM | 1443 | 46       | 2779     | 5.7         | 47           |
| 7/19/2019 | 9:55:45 AM | 1441 | 46       | 2643     | 5.8         | 50           |
| 7/19/2019 | 9:55:45 AM | 1411 | 46       | 2649     | 5.9         | 54           |
| 7/19/2019 | 9:55:45 AM | 1382 | 46       | 2765     | 6           | 58           |
| 7/19/2019 | 9:55:46 AM | 1408 | 61       | 2623     | 6.1         | 62           |
| 7/19/2019 | 9:55:46 AM | 1442 | 61       | 2317     | 6.2         | 60           |
| 7/19/2019 | 9:55:46 AM | 1440 | 60       | 3127     | 6.7         | 59           |
| 7/19/2019 | 9:55:46 AM | 1446 | 60       | 2689     | 6.8         | 61           |
| 7/19/2019 | 9:55:46 AM | 1510 | 60       | 2151     | 6.9         | 56           |
| 7/19/2019 | 9:55:46 AM | 1542 | 67       | 2002     | 7.1         | 50           |
| 7/19/2019 | 9:55:46 AM | 1537 | 67       | 2341     | 7.2         | 48           |
| 7/19/2019 | 9:55:47 AM | 1509 | 67       | 2815     | 7.3         | 50           |