

Electronic Drilling Recorder

Innovative solutions for hazardous locations to drive efficiency.



CONFIGURABLE

- ✓ Expandable channels to meet rig requirements
- ✓ Customizable alarms & multiple data formats/protocols
- ✓ Daily Report, Lithology, Swab, & Well Planning modules



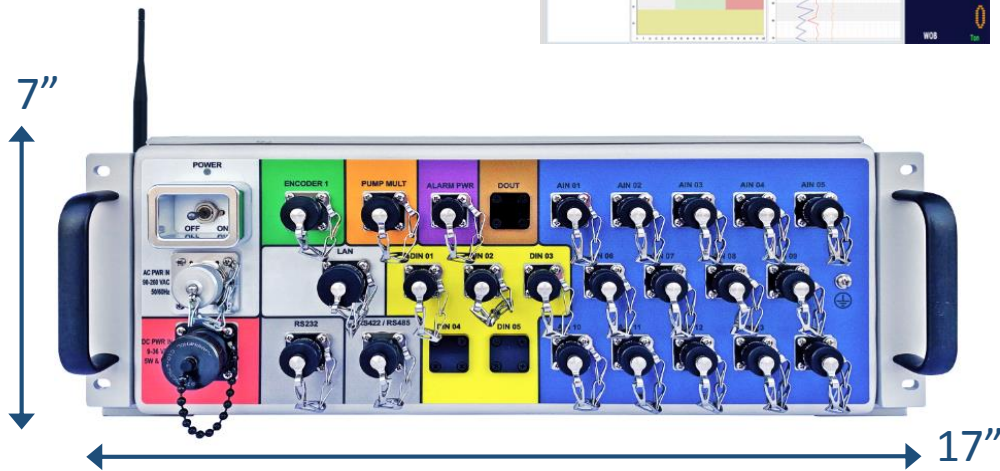
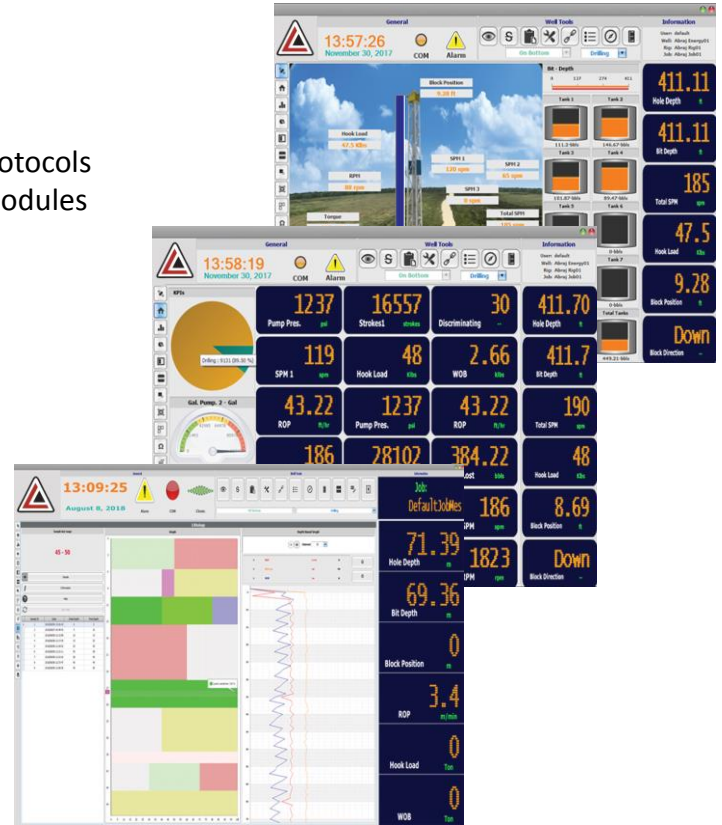
EASY TO SETUP

- ✓ Color-coded cables to match channels
- ✓ Integrated power + data cable
- ✓ Small hardware footprint for easy rig-up
- ✓ Simple activation process
- ✓ Wall-mount or Rack-mount options



COMPETITIVELY PRICED

- ✓ Optional software modules
- ✓ Use existing sensors & minimal cable mods



The Laversab Advantage



OUTSTANDING SERVICE...

- ✓ Easily customizable solutions
- ✓ Simple setup and operation
- ✓ Support over email/phone/onsite



...FOR A LIFETIME.

- ✓ 3-Year warranty (+2 years opt.)
- ✓ Rig-up & operation training
- ✓ Flexible payment options

Software Capabilities

Data recording	Real-time
Remote viewing	Available for viewing and analysis
Data presentation	Time- and depth-based graphs, reports, and comments with directional data
Reporting	Tour sheet & daily reports
Calculated data	Drilling operation, hydraulic, kick & kill, custom formula
Modules	Pressure test, Lithology, Video Surveillance
Alarms	Multiple configurations
WITS0 I/O	Serial or TCP/IP
WITSML data exchange	Version 1.3.1 and 1.4.1
Language support	English & Spanish
Units	International & Imperial
Chat	Local network chat available
Exported data formats	Ascii, Excel, LAS 2.0, LAS 3.0, WITSML 1.3
Protocols supported	Modbus TCP/IP & OPC real-time exchange

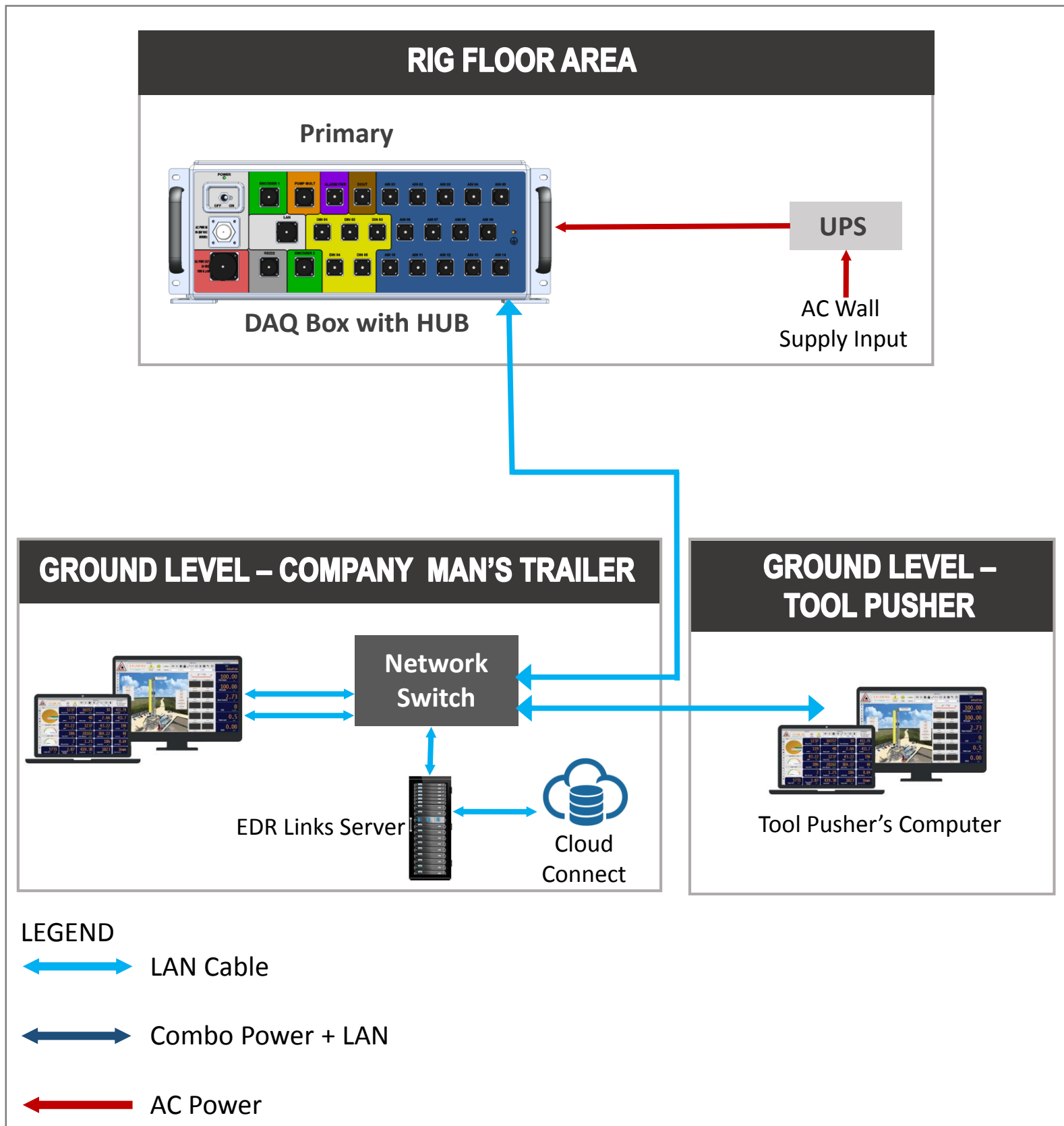
Hardware Capabilities

Channels			
Type	#	Details	Safety
Analog	14	10x 4-20mA 4x 4-20mA / 0-10V	Ex ib
Digital	5	NAMUR	Ex ia
Pumps Combo	3	NAMUR	Ex ia
Encoder	2	BEI/Dynapar/Hohner	Ex ia, Class 1 Div 1
WITS I/O	2	RS232 & RS422/485	Class 1 Div 2
Siren & Strobe	1	24V power & control	Class 1 Div 2
Radio	1	2.4 GHz or 900 MHZ	Class 1 Div 2

Cables	Hard usage cables available for all channels at various lengths
	Over-molded, color coded, and plug-to-plug for ease of use
	Water/UV/Chemical/Crush resistant
System	Modular and scalable for high channel rigs
	Simple & reliable power scheme for multiple data acquisition systems
	Mounting options: Wall-mount, Rack-mount
	Dimensions: 17"(w) X 7"(h) X 11"(d)
	Weight: 23 lbs



Example Configuration 1:
Single DAQ Box.



Example Configuration 2:

Scalable system to meet data acquisition requirements of complex drilling rigs.

