INNOVATIVE <u>ELECTRONICS</u>

I-View[®] Rig Monitoring & Reporting a FIRMS[®] Modular Component

"Quality by Design, Satisfaction by Performance"



- Easily Configurable Gauges, Alarms, Charts and Variables
- Built in Electronic Drilling Recorder
- Historical Data Logger
- Multiple Servers
- Remote Access and Reporting
- Internet Data Transfer
- Built-in Help Screens
- Remote Online Support
- User Selectable Languages

I-View Systems are Available with ATEX Certification

The I-View system is a configurable, real time, multi station, multi screen rig data logging and display system. Receiving drilling information from the I-DAQ, MODBUS or other sources, I-View gauges, charts, alarms and other parameters can be configured by the operator to display and store timely information about rig operations. This allows the operator to identify many possible drilling problems

including, flow deviations, pressure changes, drilling breaks, etc.

Each I-View screen contains analog and digital gauges, graphs and mimics that display critical information that can be easily understood. The log screens can display current trending conditions, or historical information.

The I-View system is TCP/IP based and can share drilling information with local and/or remote off site locations. It also supports password protected "Thin Clients" which allows any browser equipped computer to display drilling screens anywhere in the world where there is an Internet connection. The I-View system can have multiple independent Servers, each of which can be configured independently. Multiple Server systems can be configured to maintain a self healing data base between Servers.

The I-View is WITS capable for up to two users simultaneously.

There are 4 programmable "sum" and "difference" channels. A "difference" channel could, for example, be programmed to show the difference between temperature in

and temperature out.

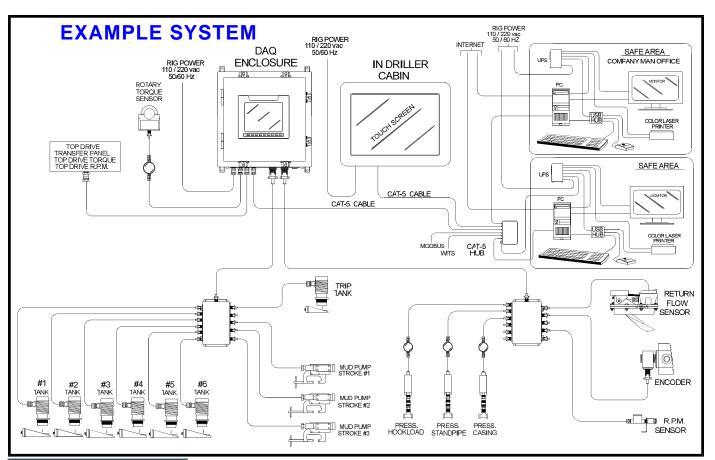
The 16 pen electronic report can be configured to display and print the history of any stored parameters, from any historical time or date.

All I-DAQ functions are accomplished using the I-DAQ screens. No laptop or other device is required to set channel zero, span, smoothing, gear ratios or other rig parameters.

Innovative Electronics Analog Channels					Stafford, Texas, USA
1 52.50	2 52.99	35	2.63 4	53.24	5 52.63
Tank 1	Tank 2	Tar	nk 3	Tank 4	Tank 5
6 52.87	7 52.99	85	3.36 9	10.67	10 52.87
Tank 6	Tank 7	Tar	nk 8 Flow		Trip Tank 1
11 1593.41	12 52.75	5 13 5	2.26 14	52.87	15 52.50
Pressure 1	Tank 9 Tank 10		k 10	Tank 11	Tank 12
16 53.36	17 2637	.36 18 1	567.77 19	52.87	20 7.81
Trip Tank 2	Torque Pressure 2		sure 2 RI	^o M- Analog	Hook Wt * 100
21 58.02	22 6.72	23 0	.00 24	0.00	25 0.00
Flow	Temp Ou	t 🔤 📃			
26 0.00	27 0.00	28 0	.00 29	0.00	30 0.00
31 0.00	32 0.00	33 0	.00 Tou	Touch an Analog Channel to Configure it	

Digital Channels Rotary RPM					
67	68	61	0	0	***
Pump1 SPM	Pump2 SPM	Pump3 SPM	Pump4 SPM	Pump5 SPM	Pump6 SPM
Setup	Configur		About		

The I-DAQ "Home" screen (shown above) continuously displays all monitored variables even if all TCP/IP connections are lost.

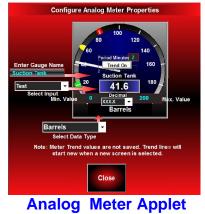




Easy TO Use

Rig personnel are constantly changing and there is often little time to train new personnel. Because I-View contains many help screens and configuration applets, rig personnel can learn the system quickly, on their own, minimizing training time.

I-View configuration screens have detailed notes explaining methods and details to quickly accomplish tasks. For example, the screen on the left provides guidance on how to access various gauge functions. The applet shown on the right is used to configure analog gauge properties.



Additional Information:

I-View can accept MODBUS inputs from other systems, for example from a hydraulic drilling rig package or a gas detector system. I-View is WITS enabled. I-View systems are designed to be installed and commissioned by rig personnel. Our customers all over the world have reduced installation costs by successfully installing these systems. For simpler systems see our 9000 Series Instrumentation.

For Additional Information Contact:





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IViewLett Rev. 8/23/13