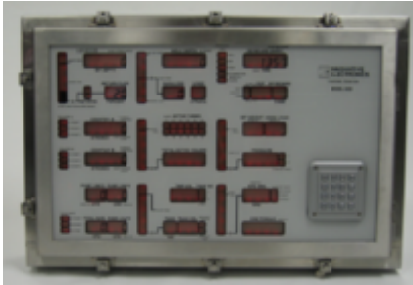




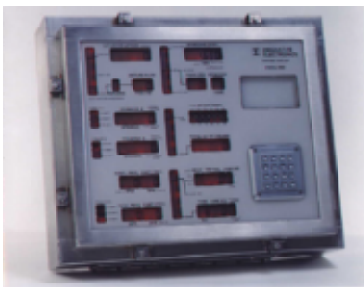
"Quality by Design, Satisfaction by Performance"



I-Drill. Model 9300



I-Mud jr. Model 9100



I-Mud Model 9200

- **Maintainable**  
Low component count for easy troubleshooting and repair

## Reduce Operating Costs

### **Eliminate Factory Service Calls**

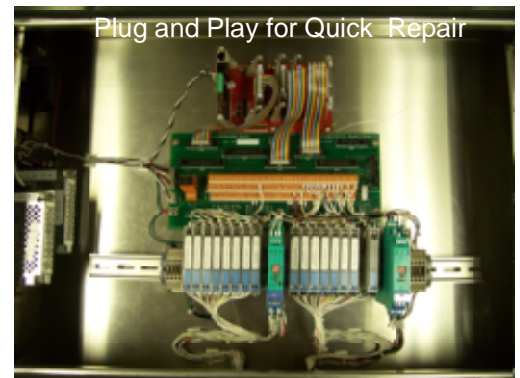
Designed to be Installed, Commissioned and Maintained by ..... **Rig Personnel!**

- **Quick Easy Installation**

Single Enclosure - No External DAQ

- **Quick, Convenient Commissioning**

All commissioning, calibrating and troubleshooting is done from the operator keypad. No laptop required



Inside a 9000 Series Display

## Description

The 9000 series systems are designed to be installed commissioned and maintained by regular rig personnel in most any part of the world. Pre-assembled cables, and reduced part count simplifies system installation.

Commissioning is simplified because the 9000 series systems have two operational modes, CONFIGURATION and OPERATE, both accessible from the face mounted keypad. The CONFIGURATION mode is password protected and is used to accomplish all setup, commissioning and troubleshooting tasks including assigning input channels, setting input offsets and spans, assigning analog output channels, setup chart recorder outputs and other system setup and commissioning tasks including testing display segments and confirming functional analog and digital inputs..

OPERATE is the normal operational mode

used by the operator. In this mode the system collects and displays data. In the operate mode the operator can set time and date, activate and deactivate items, program high and low alarms, change display values, zero displays, turn back lighting on and off, and select various drill modes.

The units have various quantities of analog inputs and digital inputs. They are designed to be bulkhead mounted. Optional panel mounting hardware available.

The 9000 series systems include three communication ports, one RS232, one RS 485 and one TCP/IP. These ports can be used for communication with remote computer systems.

Additional features include: an eight channel analog output module to operate chart recorders and other devices and intrinsically safe barriers for all channels.

Capabilities	9100 I-Mud jr.	9200 I-Mud	9300 I-Drill
Max. Mud Tanks	12 + 2 Trip Tanks	12 + 2 Trip Tanks	12 + 2 Trip Tanks
Max. Mud Pumps	One	3 or 2 + RPM	Three + RPM
Total Stroke Counters	-	Two	Two
Return Flow	Y	Y	Y
Total Volume	Y	Y	Y
Gain/Loss	Y	Y	Y
Individual Tank Volumes	1 Tank or Trip	2 Tanks or Trips	2 Tanks or Trips
Bit Depth	-	-	Y
Hole Dept	-	-	Y
Pressure	If Gauge Option	Display and/or If Gauge Option	Two plus gauge Option
Hook Load	-	-	Y
Bit Weight	-	-	Y
ROP	Y	-	Y
Drilling Torque	If Gauge Option	If Gauge Option	Y
Ton Miles	-	-	Y
Available Analog Gauge	Assignable	Assignable	Assignable
Assignable Digital Display	-	Y	-
Remote Computer Option	Y	Y	Y
RS232,RS485, TCP/IP	Y	Y	Y

## Specifications:

**Power:**

**Nominal:** 115/230VAC 50/60Hz  
135 to 370VDC

**Brownout:** 95 to 264VAC, 47 to 400HZ

**Enclosure:** IP 65

**Operating Temperature:** -40°to+185°F(-40°to +85°C)

## System Flexibility:

The 9000 series consoles contain all required items including the DAC and the computer. No external DAC or laptop computer is required. The 9000 systems can be ordered with the optional analog meter that can be assigned to display various variables. For example, electric torque.

Innovative Electronics 9000 series systems are designed to be installed, commissioned and maintained by rig personnel. Our customers all over the world have reduced installation and operating costs by successfully installing and maintaining their own systems.

## Additional Information:

The 9000 series systems can interface with the Innovative Electronics **FIRMS®** (Fully Integrated Rig Management System), rig computer systems, logging computer systems. The systems can be supplied in various configurations depending on requirements. Systems are available with or without cables and/or junction boxes, for permanent installation or for moving from site to site. These systems can be combined with other Innovative Electronics packages for complete consoles containing both hydraulic and electronic gauges and instruments.

## For Additional Information Contact:



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E-mail: [sales@innelect.com](mailto:sales@innelect.com)

Div. of Lucere, LLC

9000A4 Rev. 05/10/09