OVERVIEW

The Halliburton Digital Infrastructure surface control and monitoring system allows operators to monitor permanent downhole gauges (PDGs) and control downhole interval control valves (ICVs) from surface. Consisting of both electrical and hydraulic systems, Digital Infrastructure also provides the means for operators to remotely configure ICVs, expand deployed systems, and interpret and model data acquired by the system.

Digital Infrastructure Portfolio
WHAT IS THE DIGITAL INFRASTRUCTURE?

The Digital Infrastructure portfolio consists of the following electrical and hydraulic subsystems and applications:

» SmartWell Master supervisory application - provides a central point of control and monitoring for SmartWell and DataSphere permanent monitoring systems.
» XPIO data acquisition and control unit - allows operators to monitor and control downhole gauges and topside instrumentation.
» UACU+ system - larger variant of the XPIO system that enables monitoring of up to 10 wells/20 gauges.
» Surface hydraulic system (SHS) - designed to supply pressurized hydraulic fluid to downhole SmartWell systems and provide automatic and manual control of downhole ICVs.
» Subsea interface cards - allow users to monitor PDGs and control the reservoir management system completions in subsea applications. The cards reside in pods provided by subsea control system vendors.
» Remote power systems - designed to support the Digital Infrastructure control systems and DataSphere permanent monitoring systems in areas where conventional power and, in some cases, where communications are unavailable, unreliable, or cost prohibitive.

BENEFITS

» Monitor and control permanent downhole gauges (PDGs)
» Remotely control and configure downhole interval control valves (ICVs)
» Connect to distributed control systems (DCS) and other third-party systems for monitoring and control
» Provide remote power and communications for SmartWell® systems and DataSphere™ permanent monitoring systems when infrastructure is not available

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com