

INTEGRATED DOWNHOLE NETWORK

One network on a single cable provides access to a range of well instrumentation

Emerson's Roxar™ Integrated Downhole Network (IDN) was designed to take an infrastructure host role in well completions, offering communication, power and interfacing for a variety of downhole instruments and devices.

The driver of the IDN is the Roxar Downhole Network Controller (DHNC) card that can be placed in a rack or Surface Acquisition Unit for land or platform wells, or in a Subsea Electronics Module for subsea wells. The DHNC card communicates instrument data to the end user over standard industry interfaces and protocols.

Emerson can offer a range of instruments that can be connected to the IDN:

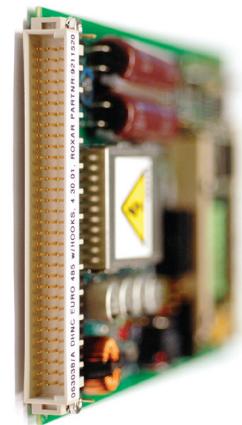
- Roxar HS series gauges
- Roxar Wireless PT – Annulus B
- Roxar Matrix Downhole Wireless Interface™



Applications

- Permanent Downhole Pressure and Temperature Monitoring
- Real time pressure and temperature monitoring in the B annulus of subsea wells
- Intelligent Multistage Completion Network™
 - Pressure and temperature measurements in the lower completion
 - Temperature profiling over the reservoir in the lower completion

Maximum number of instruments	32
Cable requirement	1 TEC (mono or dual conductor)
Maximum cable length	16,000 m (52,400 ft)
Main Interfaces	RS422, 10Mbit Ethernet
Main Protocols	MODBUS RTU, TCPI



Key Benefits

- All instruments can be served by a single cable in the well limiting the requirement to one feedthrough in the tubing hanger
- One network card enables simplified integration, testing, and maintenance activities
- Possibility to optimize monitoring strategy for each well without time consuming engineering requirements

The Integrated Downhole Network is a complete engineered solution. Consult your Emerson Automation Solutions representative for more information.

ROXAR™

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