

Orion V DAS for Intervention

Data acquisition system for real-time data monitoring at the wellsite

In the data-integrated oilfield, the most dependable and widely utilized data acquisition system (DAS) has greater utility than ever before. Along with our renowned CTES™ 24/7 customer support, the Orion™ V DAS is the most versatile system in the well intervention industry, making your data tracking and reporting easy.

With space being a premium in today's coiled tubing unit, pressure pumping cabin, wireline truck, liquid additive system, or snubbing unit, the small footprint of the Orion V DAS was specifically developed by CTES with space-savings in mind.



Safe-area



ATEX certified

Configuration

The Orion system is modular and can be configured to meet user requirements, including ATEX certification. Up to 48 channels are available for I/O. Depending on the number of channels requested, an additional enclosure may be required. The standard package provides the following channels, at a minimum:

- Speed/depth
- Tubing weight
- Pipe heavy/pipe light
- Circulating and wellhead pressures
- Pump rate/volume
- Nitrogen rate/volume

Specifications

Power input: 10-36VDC, 2-6A, 30W (typical); optional 110-220VAC (Enclosure size may increase for certain options.)

Operating temperature: -4 to 140°F (-20 to 60°C), 95% RH (non-condensing)

Storage temperature: -40 to 185°F (-40 to 85°C), 95% RH (non-condensing)

Enclosure dimensions (W x H x D):

Standard..... 16 x 12 x 7 in.
ATEX 23.6 x 23.6 x 8 in.
Snubbing..... 20 x 20 x 8 in.

Features and benefits

- Available in ATEX certified or safe-area NEMA-4X stainless steel enclosures
- Wireless data transmission
- Flexible configurations that accept inputs such as Serial RS232/485, ASCII, WITS0, TCP/IP, and output Serial ASCII with WITS0
- Emergency Stop System (ESS), Slip Mitigation, Load Sense™, and Injector Auto Lube integration-ready
- Pressure, weight, depth, and other analog, digital, or voltage sensors
- Remote Orion Viewer (ROVer™) HMI
- PC: Standard, “ruggedized”, or hazardous area operation
- System health indicators are visible without opening the door: digital, quadrature, Serial I/O module status, and communication indicators
- Electronic Memory Unit (EMU)
 - Typical job-log storage capacity: > 2,400 hours
 - Stores diagnostic data
 - Channel configuration changes, unit description, and serial number recorded
 - EMU function internal to PLC
 - No user intervention required
- Dedicated key data tracking (depth, weight, speed, pressures) in the PLC hardware

Available via OrionNET data acquisition software:

- Purpose-built for coiled tubing, snubbing, pressure pumping, and wireline operations
- Document and report detailed job events with comments, derived, and manually driven channels, tracking time of activities on location
- Easily retrofits to existing equipment
- Wireless data transmission via CTES Live™ and LAN
- Includes local DAS health status with troubleshooting tips
- Force Monitor™ available locally and online in CTES Live with Cerberus™

Your operations, connected.

