InteLift™ HPS
Well Manager System

AUTOMATED WELLSITE AUDIT AND DIAGNOSTICS

OVERVIEW

The InteLift™ horizontal pumping system (HPS) Wellsite Manager System provides operators remote management and secured real-time monitoring of multi-HPS wells through event-driven communications from our network of sensors, instruments, and other devices. Targeted alarms and notifications are leveraged to mitigate trips to the site by remotely starting and stopping the unit and adjusting setup points and parameter limits such as suction pressure, vibrations, and speed of the unit. Guaranteed data delivery, secure communication, and rich visualization result in operators being fully equipped to increased uptime and production and lower operating expense.

FEATURES

» Event-driven communication from our Industrial Internet of Things (IIOT) network of sensors, instruments, and other devices
» Ability to monitor up to 5,000 parameters with real-time charting
» Live dashboards: operator, advanced, health, and diagnostic
» Two programmable proportional integral derivative (PID) controls
» Real-time diagnostics for
  – Well uptime performance
  – Well production performance
  – Shutdown events
  – Realtime charting
  – Power consumption
» Realtime performance analysis
  – Actual operating point vs. target
  – Alarms and notifications if outside operating range
  – Power consumption performance
» Supports all HPS manufacturers

BENEFITS

» Remotely managed and secured device
» Guaranteed auto-data delivery
  (never miss any data or event)
» Multi-well support (up to 20 wells)
» Shutdown protection
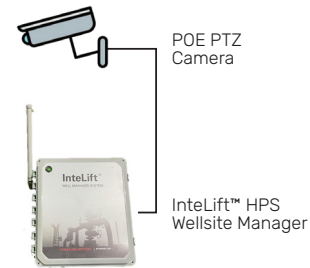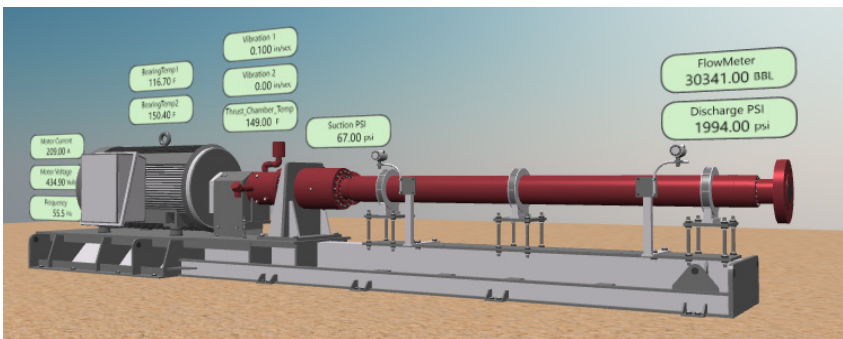

InteLift Well Manager System Panel - Stand Alone

InteLift HPS Well Manager System can be installed with a complete panel or as a stand-alone solution inside an existing Variable Speed Drive or facilities enclosure.

HPS PANEL HARDWARE SPECIFICATIONS

- » NEMA 4 Enclosure
- » 7" Touch Screen Color Display Optional
- » IO Channels Optional
- » 8 Analog Input (24-bit resolution)
- » 1 Analog Outputs (0-5V or 4-20 mA)
- » 4 Digital Inputs
- » 2 Digital Outputs
- » Expandable IO with Add-On IO Cards
- » 4 Ethernet Physical Ports (Optional 8)
- » Support Up to 4 different Networks Subnets
- » 4 GB Internal Memory Storage
- » Optional 128 GB SD Card Storage

- » Optional LTE Communications
- » 720W UPS Power Backup
- » RTU 1 GHz Processor - ARM Cortex A8 – TI AM3358 with 512 MB RAM
- » Onboard 4 GB Storage (Optional 128GB SD Card)
- » Two RS232, Two RS485 and USB
- » Optional 5MP PTZ Camera
- » Support WIMAX CPE Interface
- » Optional WirelessHART Gateway
- » Optional Wireless LORAWAN
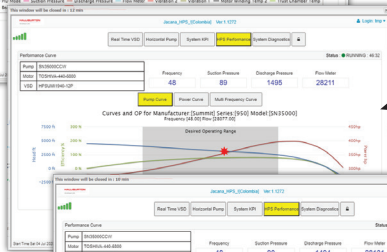- » Operating Temperature: -20ºC to 85ºC

HPS WELLHEAD AUTOMATION

POE PTZ Camera
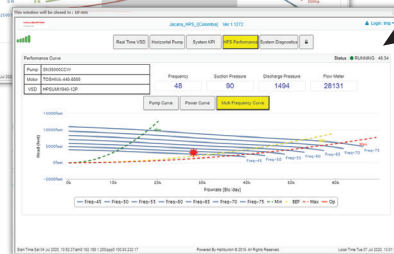
InteLift™ HPS Wellsite Manager

Realtime HPS on-site trends

Pump Efficiency Chart

Multi Frequency Chart

Firmware Features

- » Guarantee data delivery to SCADA
- » Two years of local data storage
- » Remote firmware & config. updates
- » Secure communications
- » Rich visualization

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IIOT PANEL SOFTWARE SPECIFICATIONS

» Remote firmware update

» Remote configuration

» One file deployment and configurations

» Guaranteed auto-data delivery to SCADA

» Multiple protocols
   – OPC optional
   – DNP3 optional
   – MODBUS
   – MQTT
   – FTPS

» Event-driven notifications (SMS/ emails)

» Multi-Interval data logging (up to 25)

» Multiple visualization dashboards

» Scheduled and on-demand reports

» Health and diagnostics dashboard

» Expandable with user-defined apps

» Time synchronization

» Multi-level user accounts

» Flexible MODBUS register data mapping

» Supports up to four different virtual network subnets

» Remote control and settings

» Can support up to 32 wells

» Complete audit trail

» Up to one year of local data storage (up to 10 years with 128 GB SD card)

» Supports LTE, LoRa, WirelessHART, satellite, and WIMAX communications

» InteLift Apps:
   – HPS manager
   – Video surveillance
   – Wet gas algorithm
   – AGA3 and AGA8
   – ISAGRAF 61131

» Two programmable ID controls

» WirelessHART Gateway

» LoRaWAN Gateway

» Data Gateway

INTELIFT SOFTWARE PLATFORM CAPABILITIES

SCADA

» Full SCADA solution

» Alarms and notifications

» Scalable

VISUALIZATION

» HTML5 visualization

» Customizable views and dashboards

» Custom views for HPS manager and other AI methods

» Any device

ANALYTICS

» Real-time performance

» Real-time diagnostics

» Asset reports

» Live assets performance

» Trend and correlation analysis

» Well events analysis

HISTORIAN

» Supports both MS SQL and time-series historian

» Unlimited data archiving

» Smart caching for fast performance

» Support for external historians (Oracle, OSI-PI)

PREDICTIVE

» Machine learning

» Virtual metering

» Failure and events

» Prediction

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

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