ForeSite® EDGE

Driving continuous production performance through autonomous wellsite management

Applications

- Reciprocating rod-lift wells
- Gas-lift wells
- Conventional automation equipment from any manufacturer

Features and Benefits

- Harnesses Production 4.0 technologies—including IoT-enabled hardware, cloud computing, and advanced analytics—to provide true autonomous well management that increases production and uptime.
- Pushes data via MQTT protocol to deliver continuous real-time data and instaneous alerts when human intervention is required.
- Updates engineering models on the Edge—or at the wellsite—to deliver a comprehensive view of production performance.
- Eliminate over- and under-pumping with autonomous pump-idle-time adjustments.
- Predicts artificial-lift failures before they occur via advanced analytics.
- Maintains optimal injection rates with autonomous adjustments.
- Enables enhanced decision making with storage capabilities up to 3.5 million cards.
- Improves personnel efficiency by enabling production teams to focus on proactive optimization rather than reactive maintenance.
- Installs as a standalone automation device or as an addition to existing automation equipment in the field.
- Evolves with future needs and lift methods.

Tool Description

ForeSite Edge is next-generation automation technology that harnesses the power of Weatherford ForeSite and CygNet® IoT platforms to introduce Production 4.0 concepts to the oilfield. Installed as a standalone automation device or paired with your existing automation equipment, Edge leverages real-time data and modelling at the wellsite to deliver continuous autonomous production optimization.

With built-in ForeSite software, Edge collects and analyzes data streams that can be pushed to any authorized device in the world, including laptops, tablets, and smart phones. At the wellsite, ForeSite Edge autonomously manages the artificial-lift system for operations such as pump idle-time and gas-injection rates. The technology uses predictive analytics to anticipate failures before they occur, which reduces downtime, improves mean-time between failures (MTBF), and maximizes artificial-lift uptime and production.

ForeSite Edge leverages high-frequency data and modelling at the wellsite for truly continuous production optimization that includes autonomous lift adjustments and well-performance diagnostics.

ForeSite® EDGE

Specifications

PC

Power	12 VDC
Operating range	-4°F to 158°F (-20°C to 70°C)
Processor	1 GHz Dual Core (min.)
Memory	4 GB
SSD	64 GB
Coolant	Fanless Design
Ports	2 Ethernet, 2 USB 3.0, Serial
WiFi option	Yes
LTE option	Yes
DIN rail	Yes
UL certified	Yes
Warranty	12-month

Enclosure

Dimensions	9 in. x 7 in. x 6 in. (22.86 cm x 17.78 cm x 15.24 cm)
Design	GRP
NEMA 4	Yes
UL certified	Yes
Panel mount	Yes
Screwed front	Yes
Metal backplane	Yes
Room for PC/radio connections	Yes
Power supply (remotely mounted)	12-24 VDC
External antennae option	Yes

Weatherford®