Red Jacket IQ2 Smart Controller

Intelligent Monitoring & Control of Your Submersible Turbine Pumps

Why the Red Jacket IQ2 Smart Controller?

The Red Jacket IQ2 Smart Controller provides operators with real time status and diagnostics for monitoring their Submersible Turbine Pumps (STPs), ensuring site uptime and optimal fuel flow to customers. It features a full-text 2-line display screen providing visibility to STP status and descriptive alarms on the controller. Intelligently monitor pump performance through advanced analytical reporting.

HIGH PERFORMANCE

IQ2 optimizes fuel flow rates and STP operation through continuous monitoring of pump and motor parameters. With IQ2:

- Use the Helper Mode to set power thresholds at which STPs will turn on as needed to achieve desired flow rates during peak demand
- Protect critical assets quickly with < 10 milliseconds (ms) reaction time
- Controls all The Red Jacket and Maxxum liquid fuel STP motor sizes: 3/4, 1.5, 2, 3, 4, and 5 Horsepower (HP), single- and three-phase

HIGH RELIABILITY

IQ2 is designed and manufactured to the same best-in-class quality standards as the rest of the Red Jacket product line.

- Energy measurements are continuously performed at least 100 times a second providing protection against electrical transients
- IQ2 provides the best-in-class reliability with its fixed-speed technology and offers a simplified and robust method for controlling the pumping infrastructure

EASY INSTALLATION & SERVICEABILITY

Wiring is easily accessible through the front panel of the controller, versus competitive options through the side of the controller, enabling technicians to more efficiently and safely service the IQ2.

- Smart, automatic calibration learns the electrical characteristics and HP selection upon start-up, providing a fast and seamless installation process
- Enhanced controller interface and configuration capabilities through front panel keypad

LOWER COST OF OWNERSHIP

The enhanced diagnostic feature set of IQ2 along with its high performance and reliability, reduces labor costs for servicing the controller and maximizes site uptime.

COST SAVINGS CATEGORY	SAVINGS LEVEL
Troubleshoot without the need to open the controller	$
Less susceptible to electrical transients	$$
Fast protection for your critical assets with < 10 ms reaction	$$$
Remote Pump Status and Diagnostics	$$$$

PUMP STATUS & ADVANCED DIAGNOSTICS

Streamline service calls through precise monitoring and diagnostics of Red Jacket equipment through the IQ2 and TLS-450PLUS or TLS4 Series Automatic Tank Gauge (ATG).

▶ DIAGNOSTICS & MONITORING ON-SITE

- **Protection:** Fast reaction time to reduce risk of motor damage
  - Dry run
  - Under-voltage/over-voltage
  - Locked-rotor
  - Phase-loss
  - Self-test
  - Overload
  - Extended run protection
- **Electric parameters reports and diagnostics:** voltage, current, power, frequency
- **Enhanced power management insights:** active power, reactive power, apparent power, power factor

▶ ENHANCED AUTOMATION & STATISTICS WITH TLS-450PLUS

Connecting the IQ2 and TLS-450PLUS enables enhanced monitoring capabilities via the IPC software.

- **Manifold tanks:**
  - Virtual Siphons: allow user to define the most suitable dispensing mode
  - STP prioritization
  - Automated flow increase (Helper Mode): turn ON manifolded STP according to flow demand
- **Controller diagnostic status:**
  - Pump status
  - Error
  - Communication
- **Historic event logs and statistics:**
  - Maximum, minimum, average voltage, and current
  - Pump usage and fault counts

▶ SPECIFICATIONS

IQ2 Smart Controller	
Dimensions (L, W, D)	10.5" x 8.24" x 7.08"
Handle Voltage	115 V or 230 V
Power Relay	• 200 - 250 VAC 1P, 2 HP / 1.5 kW AC-3, 50/60 Hz MAX • 200 - 415 VAC 3P, 5 HP / 3.75 kW AC-3, 50/60 Hz MAX • 20 A , Per phase MAX
Terminal Lug	Size 8-14 AWG wire
Network Connectivity	Up to 31 IQ2 Smart Controllers can be connected on a single network
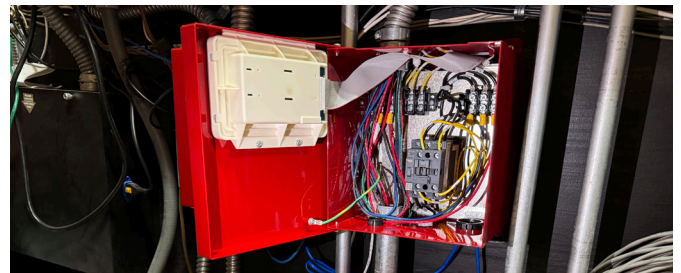
"I need more information about the status of my STPs and I need it shown in an actionable way."

The IQ2 Smart Controller provides an effective way to remotely diagnose STP alarms.

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