

Zenith GFI surface cabinet

Control and communicate with the GFI ESP gauge

Applications

Production operations with the Zenith GFI ESP downhole gauge

Features and benefits

- Simplifies installation, commissioning and operation with single surface enclosure
- Separates high and low voltage parts
 - Isolates and secures HV sections
- IP66 rated, TUV and CE certified
- Capable and robust software with touch-controlled intuitive interface
 - Compiles logged data
 - Logs and captures events
 - Improves fault analysis
- Communicates via Modbus signals
- Enables relevant data recovery with built-in memory logger
- Allows direct data download via USB
- Safeguards pump and well with alarm/trip, protecting against:
 - Unnecessary workover and expenditure
 - Excessive well draw-down
 - High or low flow rates (pump upthrust or downthrust)
 - Dead heading or shut-in
 - Resonant vibration frequencies

The **Zenith™ GFI™ surface cabinet** provides the interface for communication with the Zenith ground fault immune (GFI) electrical submersible pump (ESP) downhole gauge, allowing monitoring, protection and data logging of ESP and well parameters.

The cabinet also ensures an electrical barrier between the high voltage ESP supply power and the GFI surface

panel, with a 5,000-V interface module allowing the surface panel to communicate with the downhole gauge.

Safety and handling

Surface equipment must not be operated without a high integrity earth connection.

Construction	
General	Floor/skid mounted
Material	Powder coated mild steel enclosure (316 stainless steel option available)
Display	12 in. color touch screen display
Dimensions	67.3 x 24.6 x 21.1 in (1709 x 626 x 536 mm) h x w x d
Weight	375 lb (170 kg)
Operating temperature	23°F to 122°F (-5°C to +50°C)
Waterproof sealing	IP66

Data gathering	
Data logging	32GB hard drive fitted as standard
Memory card	USB memory stick to download .csv file data format
Data transfer (SCADA)	RS232/RS485 Modbus
Pump protection	Trip relay (shut down) available
Input/output ports	(Waterproof) USB 2.0 x 1
Communications	User defined Baud rate
Interface	USB IP67 rated connector
Standards	UL/CSA/IEC TUV certified

Power requirements

Power supply	440 or 480 VAC \pm 10% a power supply with 1500 VA capacity is required
Frequency	50–60 Hz
Maximum power	1500 VA, nominal 500 VA
Fuse rating	6 A 500 V MCB Internal fusing for AC and DC power supplies 3 * 6 A Bussman HV fuses 3 * 1/8 A Bussman HV fuses

Gauge functionality

Output gauge supply	120 VDC current limited 250 VAC 7 A maximum GFI gauge supply
Alarm and trip relay	4 * 250 VAC/DC 1 A volt free SPCO activated from user selected readings
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