

# DuoSeries LB 475 Fracturing

Optimized for use in oil fields

## Next Generation Density System

- Specially designed for hydraulic fracturing and cementing applications
- Measuring density, specific gravity or pounds proppant added
- Maximum ease of use and advanced Touch HMI interface
- Simplified calibration procedure
- Advanced self-diagnostics and monitoring features
- Direct replacement of predecessor model LB 444 and translator unit
- Optional in-field user-interface for FracSENS LB 6770
- Outputs slurry density (g/ccm, SGU) or PPA to data control system

Detector powered from transmitter



Display of history and trends (Process value, count rate, and detector temperature)

Additional service interfaces via USB and Ethernet, for remote access

3 relay outputs (2x SPDT and 1x SPST)

Very easy handling and operation through 3.5" TFT touch panel. Alternatively, keyboard and mouse can be connected via USB.

Diagnostics with event log, change log and data log



## The easy-to-use transmitter

The LB 475 Fracturing Evaluation Unit allows for easy operation with a simplified user-interface. Setup is quick with few set parameters and a two-point calibration that can be done on air and water, or on water and slurry of a known density.

Depending on customers' needs, the transmitter output can be configured for units of specific gravity (SGU), "pounds per gallon" (PPG), or a calculated "pounds proppant added" (PPA).

## Designed for Operators

The DuoSeries LB 475 fracturing system is characterized by an advanced, customer driven operation.

The main enhancement compared to its predecessor is the ease of operation with the outstanding and robust 3.5" TFT touch panel with industrial design.

Moreover the transmitter provides a number of valued diagnostic and monitoring features for outstanding reliability.

## Cabinet

Optionally the transmitter can be installed in a robust wall-mounted, steel cabinet (IP 65).



## DuoSeries LB 475 Fracturing

### Operating data

Power supply	100...240 VAC $\pm$ 10 %, 50 ... 60 Hz, 30 VA 24 VDC (18 ... 30 VDC), 30 W
Ambient temperature (Transmitter)	Operation: -20 ... +60°C (-4 ... +140°F), no condensation Storage: -20 ... +85°C (-4 ... +185°F), no condensation
Design	19" module 3RU, 21HU, protection IP 20
Processor	Dual Core CPU
Installation	In wall-mounted cabinet (up to 2 units) In 19" rack (up to 4 units) Other options available on request

### Certificates

Other certificates	CE NRTL according to UL/CSA approval (100...240 VAC only)
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### Signal inputs and outputs

Signal output	4 ... 20 mA, potential-free / max. impedance 500 $\Omega$
Digital inputs	2 inputs, for external calibration
Digital outputs	1 relay (SPDT) for failure event 2 relays (SPDT and SPST) for high/low PV alarm, detector temperature, etc. (see manual for all options)
Units	g/ccm, SGU, PPA
Interfaces	USB (for software update, data backup, keyboard, mouse) RS 485, Ethernet (for remote access)
Data backup	internally: in non-volatile memory externally: USB memory device

### Software

Menu languages	English, German, French, others on request
Features	- Easy calibration - Automatically generated message for pending source exchange - Diagnostics according to Namur NE-107 with event log, change log, data log

