LASSO Technologies, LLC | Alpha

The Lasso **Alpha** monitors and transmits data from a variety of operational standards sensors, including

- Pressure
- Temperature
- Level
- Chemical
- Generator
- Fuel Gauges
- Ultrasonic
- Engine Controls

Alpha communicates from the asset's location using Globalstar satellites, AT&T, Verizon, a combination of all three or local Wi-Fi hotspots. Sensor data is made available to customers through the Lasso Reporting Platform.

Typical Alpha field monitoring applications include:

Tank
Tank level, GPS, temperature monitoring using robust radar-based sensors

Lake Level/ Rainfall
Measures water level, PH & salinity, rainfall, ORP oxidization reduction capability or ability for a lake to break down contaminates

Engine
Measures RPMs, odometer, MPH, oil PSI, oil life, coolant, fuel level %, battery voltage & engine faults.

Aquifer Water
Measures water level, PH & salinity, Total Dissolved Solids, chlorides & ORP

Generator & Pumps
Generator location, voltage, current pressure, cycles, run time. Remotely turn on-off.

Water Treatment
Measures flow rate, level, pump cycling, high level, run time.

Small SCADA
Machine monitoring of Modbus, sensor, J1939 data: motor drive current, voltages, RPM, errors, tank process levels and flows, correlation graphs, reporting to tablet PCs over Wi-Fi.

Air Quality
H2S gas detection, C02, Methane, O2, LEL Explosive likelihood.

International Shipping Refrigerated Container
GPS and internal temperature of refrigerated shipping containers. Refrigerator status.

Lasso Reporting Platform

Lasso Technologies provides an easy-to-use data interface that gives you instant office or field access to all your globally distributed Alphas.

- Assign who can track your assets.
- Set up customized email and/or text alerts for movement or boundary violation.
- Select breadcrumb tracing with date ranging.

Local, regional, national or global – you'll know where your assets are located.

Do not use Lasso where transmission errors or product failure may cause injury or loss of revenue.

LASSO® Technologies, LLC | **Alpha**

CERTIFICATION OPTIONS:

- Global (IECEx) Gas and dust
- IECEx BVS 11.0059X
- Ex db [ia Ga] [ib] IIC T4...T6 Gb
- Ex tb IIIC T80C...T130C Db IP66
- Europe (ATEX) Gas and dust
- BVS 11 ATEX E 114 X
- Ex II 2(1) G Ex db [ia Ga] [ib] IIC T4...T6 Gb
- Ex II2 D Ex tb IIIC T80C>>>T130C Db IP66
- IP 66 Waterproof enclosure

SPECIFICATIONS:

Size:	4.7x4.3x4.3in (135x147x148mm)
Communication:	Globalstar Satellites
Main Control CPU:	TIMSP430-4619 5Mhz
Operating System:	Salvo Multitasking, MSP430
Serial Ports:	(1) RS-285 RTU modbus
Analog Ports:	(1) Voltage or 4-20 mA Current Configurable
Display & Keypad:	OLED 2x16 character display [up, down, learn, reset, wake buttons]
Battery Life:	Typical 3000 transmissions
Battery:	(8) AA L91 Energizer Lithium (-40 to 140F -40C to 60C)
Low Power Mode:	<.1ma when sleeping

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