Pressalis

Datasheet

Submersible level transmitters

LT42

LoRaWAN battery level gauge with display



Round LCD gauge on a stainless probe, reporting over LoRaWAN from a 13000 mAh battery, ranges to 50 m.

Depth range	Network	Battery	Display
0 to 1 m up to 0 to 50 m	**LoRaWAN**	**3.6 V, 13000 mAh, 2 to 6 years**	**LCD with push buttons**

Overview

LT42 is a battery-powered level gauge that reports over LoRaWAN. A 304 stainless steel probe sits in the liquid on polyethylene cable, and the round housing above it shows the level on an LCD with push buttons. The housing is 83.5 mm in diameter and 128.5 mm high, with an M30 x 1.5 thread at its base.

Power is a 3.6 V lithium battery, 13000 mAh as standard, with a service life of 2 to 6 years depending on how often it reports. With sampling every minute the battery runs 120 days at one report every 10 minutes and 800 days at one report per hour. Sleep current is 25 µA or less.

Ranges run from 0 to 1 m up to 0 to 50 m, accuracy is ±0.5 % or ±1 % of span, and long-term stability ±0.2 % of span. Listed media are water, diesel and gas oil. It goes on reservoirs, hydrological stations, wastewater basins and tanks on sites with LoRaWAN coverage and no mains power.

Specifications

Measurement

Measurement	Hydrostatic level, submersible
Depth range	0 to 1 m up to 0 to 50 m water column
Accuracy	±0.5 % or ±1 % of span
Long-term stability	±0.2 % of span
Overload	2 x range

Medium and environment

Media	Water, diesel, gas oil
Medium temperature	-10 to 70 °C, no freezing
Storage	-40 to 80 °C, 0 to 95 % RH
Protection	Housing IP65, probe IP68

Wireless and power

Network	LoRaWAN
Battery	3.6 V lithium, 13000 mAh standard
Battery life	2 to 6 years, depending on reporting interval
Battery life, report every 10 min	120 days, sampling every minute
Battery life, report every hour	800 days, sampling every minute
Current	Sleep 25 µA, sampling 5 mA for 400 ms, sending 35 mA average for 2 s, online 15 mA for 90 s, all maximum
Display	LCD with push buttons

Mechanical

Probe material	304 stainless steel
Probe size	28 mm diameter, 138 mm long
Cable	Polyethylene
Housing	83.5 mm diameter, 128.5 mm high
Housing thread	M30 x 1.5

Common configurations

Any combination from the ordering code can be quoted. Other ranges and connections on request.

Depth range	Network	Accuracy	Order code
0 to 2 m	LoRaWAN	±0.5 % of span	**LT42-W2-A05**
0 to 5 m	LoRaWAN	±0.5 % of span	**LT42-W5-A05**
0 to 10 m	LoRaWAN	±0.5 % of span	**LT42-W10-A05**
0 to 20 m	LoRaWAN	±0.5 % of span	**LT42-W20-A05**
0 to 50 m	LoRaWAN	±1 % of span	**LT42-W50-A1**

Ordering code

One code from each group, in this order. Example: **LT42-W1-A05**. Send the code and the quantity to **contact@pressalis.com** for a quote.

LT42	-	W1	-	A05
Model		Depth range		Accuracy

Depth range

W1	0 to 1 m water column
W2	0 to 2 m water column
W5	0 to 5 m water column
W10	0 to 10 m water column
W20	0 to 20 m water column
W30	0 to 30 m water column
W50	0 to 50 m water column
X	Other range, state in the request

Accuracy

A05	±0.5 % of span
A1	±1 % of span