



LH-230M 3.0

- A locator based on GNSS and LTE technology, designed for operation on objects without an external power supply, such as trailers, containers, construction machinery, or railway wagons.

The device is a GPS and BTS (cell tower) position transmitter with a GSM modem (2G, 4G), powered by built-in batteries. The battery capacity allows for at least 1,100 transmissions to the monitoring system — corresponding to approximately 3 years of operation when transmitting once per day (every 1,440 minutes). Battery replacement is only possible at the manufacturer's service center.

- Designed for mounting on metal surfaces – equipped with 4 magnets providing a total holding force of approx. 100 kg.
- Storage mode – when activated, the device does not transmit any messages; activation is performed using a magnet.
- Equipped with two tamper sensors: The first is triggered upon unauthorized opening of the enclosure. The second activates when the device is detached from a ferromagnetic surface. The detachment sensor arms automatically within 5 seconds after the device is placed on a ferromagnetic surface, and by default, its activation is confirmed by an audible signal.

The transmitter reports at least once per day, at a fixed full UTC hour. Additional reports can be configured, with intervals adjustable to the nearest minute from the main scheduled report. The transmitter supports a retry (repetition) function — automatic reattempts in case of failed transmission. A retry is triggered if a connection with the server cannot be established. Optionally, it may also retry if GPS location cannot be obtained. Up to 6 retries can be configured, defining the time delay after the initial failed attempt (not more often than every 10 minutes). Each attempt (including the initial one) lasts no longer than 8 minutes to optimize battery consumption. If the connection quality is too low for stable data transmission, the transmitter can send basic status and location information via SMS. Such an SMS does not cancel further retry attempts. Upon tamper detection, the transmitter can temporarily switch to a higher, configurable reporting frequency. Tamper alerts are sent both via data transmission and SMS to the receiving server. Additionally, the transmitter can notify a specified phone number via SMS, independent of the monitoring system. The device determines its position using both GPS and cell tower triangulation (BTS). Typical BTS-based location accuracy after establishing a connection is 6 km, and not worse than 40 km under poor conditions. The transmitter is designed to operate without additional protection against weather, as it features a hermetic (sealed) enclosure.

Standard equipment:



Options:



Technical specifications LH-230M 3.0

Technology:	GSM, GPRS, LTE(4G), GNSS (GPS, GLONASS), LBS (triangulacja BTS)
Power supply:	Built-in battery
Operating temperature range:	From -30°C to +85°C
GSM antenna:	Built-in
GNSS antenna:	Built-in
Dimensions: W x L x H:	140 × 85 × 56 mm
Enclosure protection class:	IP68
SIM card type:	Nano (4FF)
Internal data memory:	30 000 records
Czujniki:	Enclosure opening sensor, Detachment sensor (detects removal from a ferromagnetic surface), Magnet detection sensor (used to deactivate storage mode)
Signaling:	Buzzer / sound indicator
Battery:	Built-in batteries 144Wh
Mounting:	4 magnets, each with a holding force of 100 kg

