ECD Electronic Components

Low Cost Tracker Light

The LCT Light is a very affordable, extremely robust asset tracker and represents the simplified version of the LCT Plus. It is suitable for tracking a large number of different objects (boxes, containers, pallets, etc.) for which an approximate position determination is acceptable. It was designed with the lowest possible costs in mind, making it also suitable for one-off applications (e.g. monitoring of longer transports). The LCT Light determines the location through its current radio cell in the GSM network. The integrated sensor technology also enables the recording and monitoring of temperatures and motion states.

Technical features

- · Housing: IP 68, waterproof, shockproof
- · Connectivity within the EU given
- Plug & play solution; completely independent function
- Low cost (all-in-one package possible: device, portal, connectivity and service)

Especially suitable for

- · Forwarders
- · Logistics provider
- · Food industry
- · Pharmaceutical sector
- · Mechanical engineering
- · Construction industry
- · Facility management

Advantages

- More transparency: timely information about transport and movement processes as well as estimated arrival times
- More security: theft monitoring via geofences with alarm message possible
- Simple implementation: Plug & Play solution without intervention in the IT structure
- **Creation of added values:** additional information such as motion start and end of movement, recording of operating times
- **Cost transparency:** one-time acquisition costs over the full useful life, including costs for portal, connectivity and service

Technical features

- Positioning accuracy: according to the latest radio cell density
- Motion detection; free fall detection; operating hours counter
- · Log function for up to 100 data records
- \cdot Up to 1,300 transmission cycles possible





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Technical data

Localization

· Mobile radio (2G)

Radio module

- · Supports GSM
- Integrated antenna

CPU

- · ARM® 32-bit Cortex®-M0 CPU
- Storage: up to 100 data records can be stored
- Firmware update over the air (FOTA)

Sensor technology

- Digital 3-axis accelerometer for motion detection
- $\cdot\,$ Integrated temperature sensor

Battery

- Lithium iron disulphide (Li FeS2)
 4.5 V / 1200 mAh
- \cdot Not changeable

Temperature range

• Can be used at ambient temperatures from 20°C to +60°C

Housing properties

- Material: Acrylic ester-styrene-acrylonitrile (ASA)
- · Dimensions: 78 mm / 38 mm / 19 mm
- · Degree of protection: IP68
- · Total weight: 72 g
- Installation options: bonding, screwing

Runtime examples

The expected battery life depends on the number of daily position reports, the ambient temperature, the transmission and reception conditions.

With good transmission and reception conditions and an ambient temperature of 20°C, the following runtimes can be achieved:

- Typically 1,000 messages with at least 1 message per day (approx. 2.5 years)
- Typically 1,300 messages for 5 assumed messages per day (approx. 8 months)

