ECDElectronic Components

Rail Longlife

Rail Longlife enables the recording of manifold data material such as positions, shock load, arrival, departure, motion history and service life of objects over a very long operating time. The development was carried out after strict measurement standards according to the railway industry, especially for the usage of explosive product groups. Rail Longlife can be used over a period of six years without maintenance. The device owns all the necessary certificates for the usage in the rail industry.

General Features

- · Very solide (IP 65)
- · Integrated motion detection via acceleration sensor
- · Temperature sensor
- · Variable und exchangeable
- · Long-term battery package
- · Software update over-the-air
- · Operating temperature: -40°C up to +85°C
- Operating temperature ATEX-zone:-40°C up to +65°C
- Weight: 2.500 g 2.700 g (depending on selected battery package)
- Measurements (length/width/heigth):
 184 mm/ 124 mm/ 100 mm

Measurable Parameters /

Triggering Events:

- Motion (start/stop)
- · Time
- · Position/gradient
- · Shock (horizontal and vertical impacts)
- · 128 geo fences
- · Telematic data (e. g. . pace, position)
- · Temperature
- · Battery capacity

Rail Longlife – The Tracking Device For The Rail Industry

- · Multifunctional
- · Reliable
- · Maintenance-free
- · ATEX-certified



ECD

Electronic Components

Rail Longlife

Technical Data

GPS-Receiver

- 56 channels ublox 7 engine multi-GNSS (GPS/QZSS, GLONASS)
- Fast time to first fix with AssistNow (Online, Offline, Autonomous)
- · Embedded GPS antenna
- GPS acquisition rate: hot start (open sky):
 <1 s, hot start: ca. 5 s, cold start: ca: 35 s
- · GPS-Tracking up to 10 Hz
- · Low power consumption

GSM-Module

- · Quad-Band GSM/GPRS-Modul
- · SMS, E-Mail, Call, TCPIP, FTP, GPRS up to 85,6 kBit/s Upload
- · Firmware update over the air (FOTA)
- · Embedded Quad-Band GSM antenna

Acceleration Sensor ACC)

- · 3-axis, 16 Bit, high sensitivity
- · Motion and shock detection
- · Definable threshold and sampling rate

Memory

- 16 MByte Flash to save up to 112.000 data records and offline tracking
- · 32 kByte EEPROM to save configuration parameter and up to 128 geo fences

Battery

· Lithium thionylchlorid battery

19 Ah (68 Wh)

38 Ah (136 Wh)

57 Ah (204 Wh)

76 Ah (272 Wh)

95 Ah (340 Wh)

114 Ah (408 Wh)

133 Ah (476 Wh)

152 Ah (544 Wh)

· Temperature range: -40 °C up to +85 °C

· non-rechargeable; exchangeable

Housing Features

- · Material: polyester glass fiber reinforced; non-halogen
- Physical dimension:184 mm / 124 mm / 100 mm
- · Degree of protection: IP65

Certificates

- CE-certified according to telecommunication guideline (1999/5/EG) as well as RoHS guideline (2011/65/EU)
- ATEX-certified according to guideline 2014/34/EU; standards:

EN 60079-0:2012+A11:2013,

EN 60079-11:2012

Ex II 2G Ex ib IIB T4 Gb

Ex II 2D Ex ib IIIC T125 °C Db

