

Features

Certified with IK10 impact protection. One of the most rugged GPS-trackers

on the market.

Fully-encapsulated design with IP67 & IP69. Not only protected against dust and sludge but also against high pressure water and steam.

Reliability under harsh conditions has been proven by numerous standardized environmental tests.

Outstanding energy efficency ensures an extended battery life. Capable of handling more than 15000 tracking events.

Integrated accelerometer triggers the tracker when asset is moved. Tracking profiles can be configured over the air.

Lightweight M2M (LwM2M) protocol standard for reduced data consumption

Uses LPWA technology (NB-IoT & LTE-M) for a wide coverage and deep indoor penetration.







Asset Construction (VAT-800)

Datasheet

Mechanical Specification

Dimensions (W×H×D)	147 × 71 × 35 mm
Weight	420 g
Housing	PC / ABS (UL 94 flame rating V-0) completely potted housing
Mounting Options	2 × carriage bolts M6 2 × blind rivet 6 mm

Communication

Cellular Technology	NB-IoT & LTE-M combined radio solution, auto detection and switching between networks
Cellular Bands	LTE B1/B2/B3/B4/B5/B8/B12/B13/ B14/B17/B18/B19/B20/B25/B26/ B28/B66: 23 dBm output power
Hardware Platform	Nordic nRF9160
Antenna	Internal antenna
Max. Power Dissipation	1.65 W
SIM-Card	Vodafone Global IoT MFF2 SIM
NFC	Integrated NFC-Tag as interface for device ID

Operation Conditions

Operating Temperature	-20°C to 70°C
Storage Temperature	-20°C to 35°C
Humidity	up to 95 %
Ingress Protection	IP67 & IP69 according to EN 60529
Impact Protection	IK10 according to EN 62262

Sensors		
Positioning	Assisted GPS (A-GPS) Cell Location	
Temperature (Accuracy)	<0°C: ±1,5°C >0°C: ±1°C	
Accelerometer	3-axis digital accelerometer with motion detection for ±2g/±4g/±8g/±16g	

Device Power Supply

Battery chemistry	NiMH
Battery voltage	3.6 V
Battery capacity	2100 mAh
Charging	via USB charging connector (Accessory VAT-USB)
Power input	USB-A with 5 V DC max. 1W
Tracking events (only A-GPS)	> 7000* Tracking events (standard mode)
Tracking events	> 15000* Tracking events

Device Management

Remote configuration	Yes	
FOTA	Yes	

Restriction of hazardous substances 2011/65/EU RoHS + 2015/863

Certification & Test Standards

Environment

Ingress protection	DIN EN 60529
Impact protection	DIN EN 62262
Salt spray	DIN EN 60068-2-11
Mechanical shock	DIN EN 60068-2-27
Wideband noise vibration	DIN EN 60068-2-64
Temp. change -20 °C to 70 °C	DIN EN 60068-2-14
Product Safety	
Electrical safety	EN 62368-1:2018
Electromagnetic exposure	EN 62311:2008
Battery safety	IEC 62133-1
Flammability of housing material	IEC 60695
Radio Equipment and EMC	RED 2014/53/EU
	EN 301 489-1/-19/-52
	EN 61000-6-2
	EN 301 908-1/-13
	EN 303 413

EN 55032 cl. B:2015 + A1:2020 FCC CFR 47 part 15 subpart B c. B

GCF certification

 ${\tt Data\ sheet\ Asset\ Construction\ (VAT-800).\ All\ information\ without\ guarantee,\ errors\ and}$ changes excepted. Doc.ID: AC800DB1, published: 10/2023

UKCA WEEE



Others