

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 (only Cell Location)	> 15000* Tracking events

Device Management

Remote configuration	Yes
FOTA	Yes

Certification & Test Standards

Environment	
Restriction of hazardous substances	2011/65/EU RoHS + 2015/863
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
Others	
	GCF certification
	UKCA
	WEEE

*depending on environmental conditions, the usage and the configuration of the device.

