

AT500 Mini Asset Tracking Device



BLE 4.2



Internal
2200mAh
battery



IP68 waterproof



Qi v1.2 wireless
charging



eSIM



LTE Cat M1 +
2G/GPRS



GPS, GLONASS,
GALILEO & BeiDou



Internal antennas



FOTA
Firmware update
Over-the-air



5 year warranty



MEMS
accelerometer



Autonomous
operation up to 6
months



SDK
available



Magnetic mount

Technical Specifications

GSM-EGPRS / LTE Cat M1 / Cat NB2 Communication

Communications Module:	Quectel BG600L-M3
GSM EGPRS Frequency Bands:	850/900/1800/1900 MHz
LTE Cat M1 Frequency Bands:	B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26/B27/B28/B66/B85
Cat NB2 Frequency Bands:	LTE-FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66/B71/B85
GSM Antenna:	Internal PIFA PCB trace
Data Transfer Modes:	TCP or UDP

GNSS Location

GPS Receiver:	ublox SAM-M8Q
GPS Antenna:	Internal 15 x 15 x 4mm ceramic patch
L1 Receiver:	72 channels
Position Accuracy:	2.5m CEP
Receiver Sensitivity:	-165dBm (GPS + GLONASS, tracking & navigation)
TTFB: Cold start	26 sec
Hot start	1 sec
Anti-jamming:	Active CW detection and removal; extra onboard SAW band pass filter
Spoofing detection:	Built-in

BLE 4.2

BLE Module:	Silicon Labs BGM123
TX Power:	+3dBm
Sensitivity:	-90dBm
Bluetooth Compliance:	4.2 and earlier

Power

Charging:	Qi v1.2 compliant wireless charging
Internal Battery:	3.7V, 2200mAh
Battery Life:	24 hours continuous operation 120 days operation in daily update mode

Features

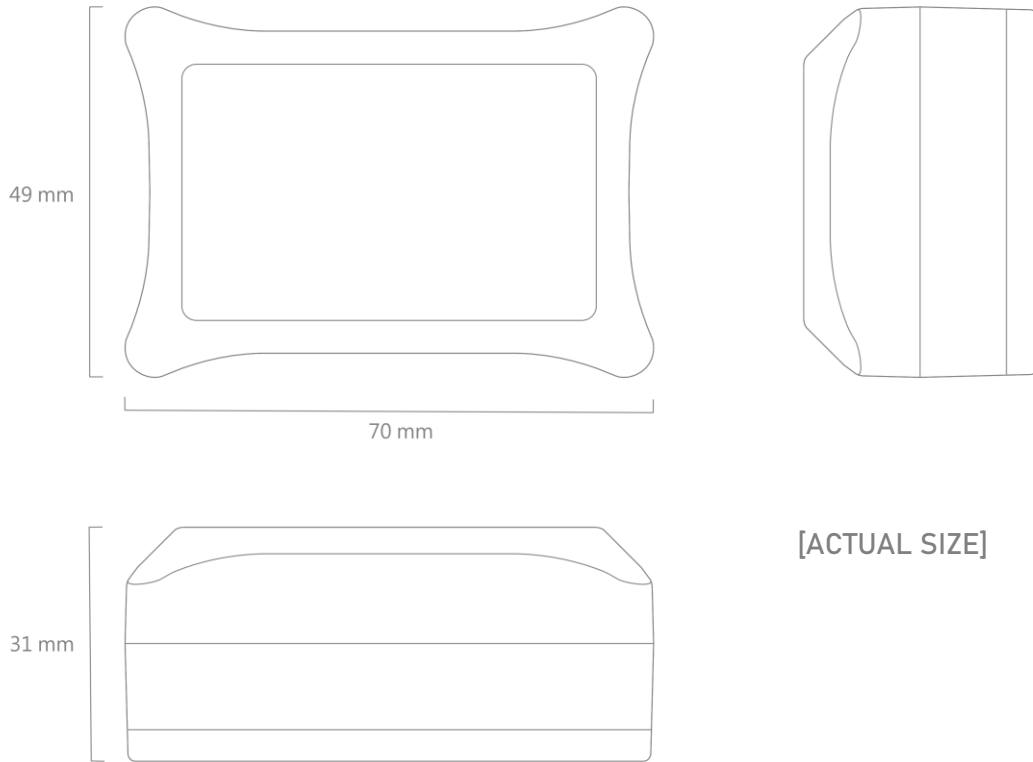
Configuration:	Astra Generic Configuration commands over SMS / TCP
Firmware update:	Supports Firmware Update Over-The-Air (FOTA)
Memory:	Total 1024k on-board non-volatile flash memory
Report storage:	8000 reports
Communication Protocol:	Astra Telematics Modular Protocol X over TCP socket

INTERCONNECT

SIM:	Supplied with Astra eSIM (factory fitted)
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Dimensions: 70 x 49 x 31 mm 80g

Weight: 80g



ENVIRONMENTAL

Temperature:
Operating -20 to +85°C (note: battery charging is suspended at higher temps)
Storage -30 to +85°C
Ingress Protection: IP68

Product Approvals: TBA

Note: Specifications may change without notice.

PRELIMINARY – January 2021