

## AT50x Series Asset Tracking Devices



AT500



AT501



AT502



AT503 (epoxy potted)

	Size (L x W x D)	Battery Capacity (mAh)	Battery Type	Battery Life @ 24hr Update	Mounting Options
AT500	69 x 48 x 32mm	2,200	Rechargeable (Qi)	1 year *	Magnet / VHB DS Tape
AT501	100 x 85 x 33mm	13,000	Replaceable (5xAA)	9 years	Magnet / M4 screws
AT502	85 x 74 x 33mm	7,800	Replaceable (3xAA)	5 years	Magnet / M4 screws
AT503	67 x 63 x 30mm	7,800	Non-Replaceable (epoxy)	5 years	Magnet / M4 screws

\*taking into account self-discharge of lithium-ion cells

Replacement AA LTC cells      £2.00 each @ MoQ 100pcs



# TECHNICAL SPECIFICATIONS

---

## Mobile Network Communications

Communications Module:	Quectel BG600L-M3
Mobile Network Services:	GSM (2G), LTE Cat M (4G) & NBIoT
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

GNSS Antenna:	Internal 15 x 15 x 4mm ceramic patch
GNSS Receiver:	Quectel LC86L
L1/B1 Receiver:	GPS L1 C/A: 1574.397–1576.443 MHz GLONASS L1: 1597.781–1605.656 MHz BeiDou B1 C/A: 1559.052–1563.144 MHz
Position Accuracy:	< 2.5m CEP @ -130dBm
Receiver Sensitivity:	-166dBm (GPS + GLONASS, tracking & navigation)
TTFB: Cold start	< 15 sec (average) @ -130 dBm
Hot start	< 2 s (average) @ -130 dBm

---

## POWER

Internal Battery:	<b>AT500</b> 2200mAh lithium-ion (rechargeable via Qi wireless) <b>AT501</b> 5 x Lithium thionyl chloride (Li-SOCl <sub>2</sub> ) 2600mAh AA cells (replaceable) <b>AT502</b> 3 x Lithium thionyl chloride (Li-SOCl <sub>2</sub> ) 2600mAh AA cells (replaceable) <b>AT503</b> 3 x Lithium thionyl chloride (Li-SOCl <sub>2</sub> ) 2600mAh AA cells (non- replaceable)
Battery Life:	see previous page

---

## BLE 4.2

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

---

## FEATURES

SIM:	QFN8 / MFF2 format astra "chip SIM" Client supplied SIM is an available option, subject to MoQ and lead-time Please contact us for details
------	--

---

## ENVIRONMENTAL

Ingress Protection :	IP69K
----------------------	-------