iotrack
gps tracking solutions

Battery–Powered Outdoor GPS Trackers
Cellular 4G/5G LTE-M / NB-IoT

digital matter

Specifications & Functionality	Barra GPS $210*	Yabby3 $225*	Oyster3 $250*	Oyster3 BLE $270*	Remora3 $350*
Summary	Compact and concealable ultra-rugged asset tracker	Compact and concealable ultra-rugged asset tracker	Ultra-rugged asset tracker	Ultra-rugged asset tracker with Bluetooth® Gateway	Ultra-rugged asset tracker with Bluetooth® Gateway and massive battery capacity
Example Use Cases	Small Equipment/Plant, Attachments, Bicycles, Test Equipment, Bins, Shipping Containers, etc.	Small Equipment/Plant, Attachments, Bicycles, Test Equipment, Bins, Shipping Containers, etc.	Equipment/Plant, Vehicles, Attachments, Trailers, Boats, Bins, Containers – Everything!	Equipment/Plant Sets, Attachments, Vehicles, Trailers, Boats, Cold Chain, Bluetooth® Tag/Sensor Monitoring	Large Equipment, Semi-Trailers, Bluetooth® Tag/Sensor Monitoring, Cold Chain, Boats, Second-by-Second Tracking.
Environment	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
IP Rating	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK06 rated housing	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK07 rated housing
Dimensions	149 x 51 x 21 mm	84 x 63 x 24 mm	108 x 86 x 30 mm	108 x 86 x 30 mm	222 x 91 x 41 mm
Cellular Connectivity	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT
Cellular Network Uploads of Location Fix Batches	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute), or 1-minute default with Sec-by-Sec Tracking
Cellular Network Connection Mode when In-Trip	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect, or Constant Connection with Sec-by-Sec Tracking
Tracking Modes	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, Movement-based, or Second-by-Second
Location Determination	Full GNSS with Advanced Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback
Location Precision	High	High	High	High	High
Location Engine	On board	On board	On board	On board	On board
On-Board Speed & Heading	Yes	Yes	Yes	Yes	Yes
On-Board Geo-fencing	Max 500 Geo-fences Max 100 points/geo-fence	Max 500 Geo-fences Max 100 points/geo-fence	Max 500 Geo-fences Max 100 points/geo-fence	Max 500 Geo-fences Max 100 points/geo-fence	Max 500 Geo-fences Max 100 points/geo-fence
Flash Memory Storage	Over 2 weeks of constant 2-minute logging	Over 2 weeks of constant 2-minute logging	Over 4 weeks of constant 2-minute logging	20 days of constant 2-minute logging	Over 20 days of constant 30-second logging
Housing Magnet Modes	Activation, None, or Tamper Detection	-	-	-	Tamper Detection
Bluetooth® Gateway	-	-	-	Bluetooth® 5.2 Gateway	Bluetooth® 5.2 Gateway
Run Hour Monitoring	Movement based	Movement based	Movement based	Movement based	Movement based
Rotation Counting	Yes	Yes	Yes	Yes	Yes
Tip Detection	Yes	Yes	Yes	Yes	Yes
Theft Recovery Mode	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)
Battery size & quantity	2 x AA-cell	3 x AAA-cell	3 x AA-cell	3 x AA-cell	2 x D-cell
Recommended Battery Type	1.5V Lithium (Li-FeS$_2$)	1.5V Lithium (Li-FeS$_2$)	1.5V Lithium (Li-FeS$_2$), or 3.6V LTC (Li-SOCl$_2$)	1.5V Lithium (Li-FeS$_2$)	3.6V LTC (Li-SOCl$_2$)
Total Battery Capacity	10.2 Wh (Li-FeS$_2$)	5.8 Wh (Li-FeS$_2$)	15.4 Wh (Li-FeS$_2$) 17.8 Wh (Li-SOCl$_2$)	15.4 Wh (Li-FeS$_2$)	100.8 Wh (Li-SOCl$_2$)
Battery Life Monitoring	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	Battery Meter % with 'Low' & 'Critical' Alerts
Estimated Battery Life	10 yrs (2 uploads/day) 5 yrs (8 uploads/day) 5 yrs (movement-based)[1]	10+ yrs (1 upload/day) 3 yrs (8 uploads/day) 3 yrs (movement-based)[1]	10+ yrs (2 uploads/day) 5 yrs (8 uploads/day) 5+ yrs (movement-based)[1]	10 yrs (3 uploads/day) 6 yrs (8 uploads/day) 7 yrs (movement-based)[1]	10+ yrs (24 uploads/day) 7+ yrs (movement-based)[2] 2 yrs (sec-by-sec based)[3]

[1] Movement-based in-trip conditions: 2-minute fix logs, 30-minute batch uploads, 1 hour/day, 7 days/week.

[2] Movement-based in-trip conditions: 2-minute fix logs, 30-minute batch uploads, 8 hours/day, 7 days/week.   [3] Sec-by-Sec based in trip conditions: 1-minute fix logs, 1-minute uploads, 4 hours/day, 5 days/week.
Battery life estimates are influenced by several factors including temperature, installation location and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. Battery life calculators are available at www.support.digitalmatter.com

iotrack
gps tracking solutions

Battery-Powered Indoor/Outdoor & Global Outdoor GPS Trackers
Cellular 4G/5G LTE-M / NB-IoT   Cellular 4G LTE Cat 1bis / 2G

digital matter

Specifications & Functionality	Barra Edge $155*	Yabby Edge $190*	Oyster Edge $230*	Oyster3 Global $270*	Remora3 Global $370*
Summary	Compact and concealable ultra-rugged asset tracker	Compact and concealable ultra-rugged asset tracker	Ultra-rugged asset tracker	Ultra-rugged asset tracker with Global Connectivity	Ultra-rugged asset tracker with Global Connectivity, Bluetooth® Gateway and massive battery capacity
Example Use Cases	Small Equipment/Plant, Attachments, Bicycles, Test Equipment, etc.	Small Equipment/Plant, Attachments, Bicycles, Test Equipment, etc.	Equipment/Plant, Vehicles, Attachments, Trailers, etc.	Test Equipment/Plant, Freight, Boats, Shipping Containers, etc.	Large Equipment/Plant, Bluetooth® Tag/Sensor Monitoring, Cold Chain, Boats, Second-by-Second Tracking.
Environment	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Outdoor	Outdoor
IP Rating	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK06 rated housing	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK07 rated housing	Waterproof IP68 and IK07 rated housing
Dimensions	149 x 51 x 21 mm	84 x 63 x 24 mm	108 x 86 x 30 mm	108 x 86 x 30 mm	222 x 91 x 41 mm
Cellular Connectivity	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT	4G/5G LTE-M / NB-IoT	4G LTE Cat 1bis / 2G (GSM)	4G LTE Cat 1bis / 2G (GSM)
Cellular Network Uploads of Location Fix Batches	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute)	30-minute default (minimum 3-minute), or 1-minute default with Sec-by-Sec Tracking
Cellular Network Connection Mode when In-Trip	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect	Connect / Disconnect, or Constant Connection with Sec-by-Sec Tracking
Tracking Modes	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, or Movement-based	Periodic, Jostle, Movement-based, or Second-by-Second
Location Determination	GNSS Scanning with Wi-Fi AP MAC Address & Adv. Cell Tower Fallback	GNSS Scanning with Wi-Fi AP MAC Address & Adv. Cell Tower Fallback	GNSS Scanning with Wi-Fi AP MAC Address & Adv. Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback	Full GNSS with Advanced Cell Tower Fallback
Location Precision	Medium-High	Medium-High	Medium-High	High	High
Location Engine	Cloud-Based	Cloud-Based	Cloud-Based	On board	On board
On-Board Speed & Heading	No	No	No	Yes	Yes
On-Board Geo-fencing	No Server based geo-fences	No Server based geo-fences	No Server based geo-fences	Max 500 Geo-fences Max 100 points/geo-fence	Max 500 Geo-fences Max 100 points/geo-fence
Flash Memory Storage	Approx. 2 days of constant 2-minute logging	Over 2 weeks of constant 2-minute logging	Over 10 days of constant 2-minute logging	20 days of constant 2-minute logging	Over 28 days of constant 30-second logging
Housing Magnet Modes	Activation, None, or Tamper Detection	-	-	-	Tamper Detection
Bluetooth® Gateway	No	No	No	Bluetooth® 5.2 Gateway	Bluetooth® 5.2 Gateway
Run Hour Monitoring	Movement based	Movement based	Movement based	Movement based	Movement based
Rotation Counting	Yes	Yes	Yes	Yes	Yes
Tip Detection	Yes	Yes	Yes	Yes	Yes
Theft Recovery Mode	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)	Yes (30-sec fix updates)
Battery size & quantity	2 x AA-cell	3 x AAA-cell	3 x AA-cell	3 x AA-cell	2 x D-cell
Recommended Battery Type	1.5V Lithium (Li-FeS$_2$)	1.5V Lithium (Li-FeS$_2$)	1.5V Lithium (Li-FeS$_2$)	1.5V Lithium (Li-FeS$_2$), or 3.6V LTC (Li-SOCl$_2$)	3.6V LTC (Li-SOCl$_2$)
Total Battery Capacity	10.2 Wh (Li-FeS$_2$)	5.8 Wh (Li-FeS$_2$)	15.4 Wh (Li-FeS$_2$)	15.4 Wh (Li-FeS$_2$) 17.8 Wh (Li-SOCl$_2$)	100.8 Wh (Li-SOCl$_2$)
Battery Life Monitoring	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts	'Low' & 'Critical' Alerts
Estimated Battery Life	10+ yrs (2 uploads/day) 5+ yrs (8 uploads/day) 5+ yrs (movement-based) [1]	10+ yrs (1 upload/day) 3+ yrs (8 uploads/day) 3+ yrs (movement-based) [1]	10 yrs (8 uploads/day) 7+ yrs (movement-based) [1]	8+ yrs (1 upload/day) 3+ yrs (8 uploads/day) 3+ yrs (movement-based) [1]	10+ yrs (12 uploads/day) 4+ yrs (movement-based) [2] 1+ yr (sec-by-sec based) [3]

[1] Movement-based in-trip conditions: 2-minute fix logs, 30-minute batch uploads, 1 hour/day, 7 days/week.

[2] Movement-based in-trip conditions: 2-minute fix logs, 30-minute batch uploads, 8 hours/day, 7 days/week.   [3] Sec-by-Sec based in trip conditions: 1-minute fix logs, 1-minute uploads, 4 hours/day, 5 days/week.

Battery life estimates are influenced by several factors including temperature, installation location and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. Battery life calculators are available at www.support.digitalmatter.com