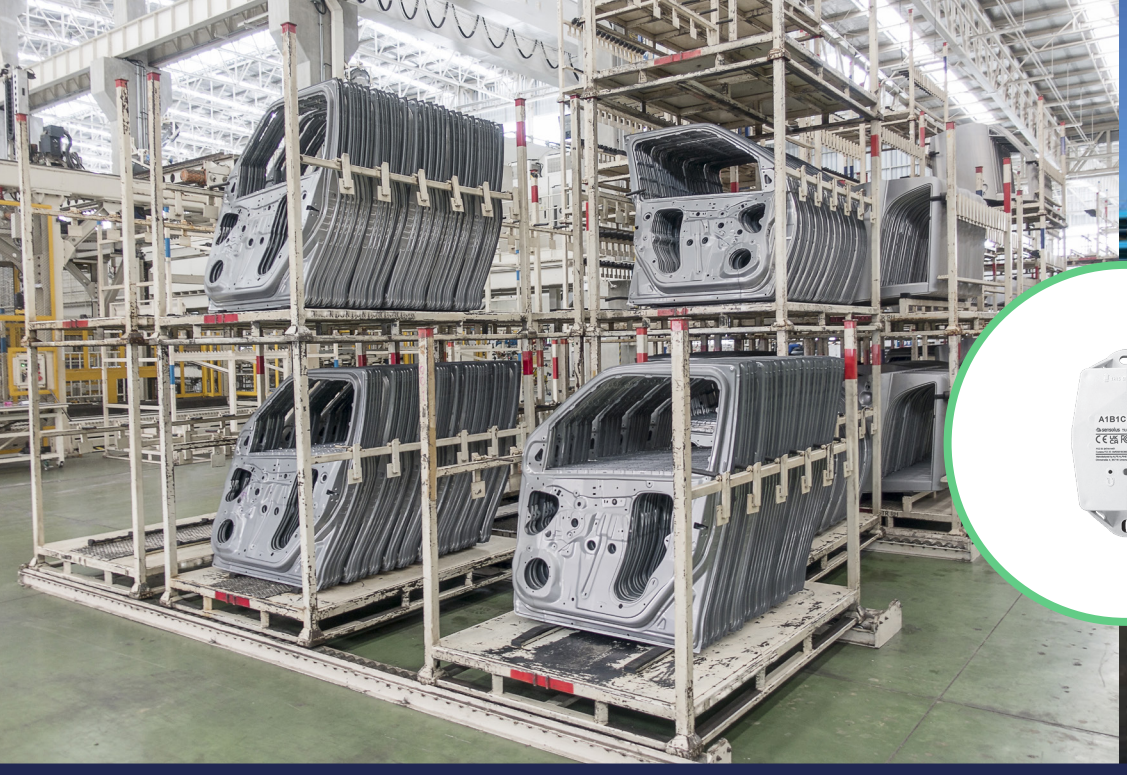

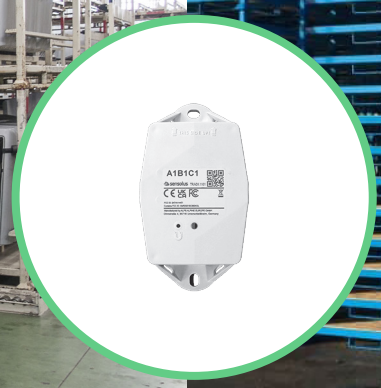

Standard Returnable Transport Packaging profile for TRACK 1101

This is the standard usage profile of a tracker attached to a returnable transport package (RTP).
This profile guarantees the optimal way to capture the real behaviour of an RTP in a power efficient way.

Profile names: **RTP Standard Track 1101**

When and how does the tracker determine location updates?

START

- Geobeacon
  IF FAILED
- GPS
  IF FAILED
- Wi-Fi
  IF FAILED
- Network

A location is captured when the asset **starts moving.**

MOVING

No location is captured when the asset is moving.

STOP

- Geobeacon
  IF FAILED
- GPS
  IF FAILED
- Wi-Fi
  IF FAILED
- Network

A location is captured when the asset **stops moving.**

+ PERIODIC

- Geobeacon
  IF FAILED
- GPS
  IF FAILED
- Wi-Fi
  IF FAILED
- Network

A location is captured every **24 hours**.

WHEN are locations determined and sent?

Locations are by default captured based on the motion pattern of your RTP. This means when the tracker detects that your RTP starts or stops moving, it will capture the location.

Next to this, the tracker also captures a location every 24 hours. This is called a periodic location capture.

For every parameter a default setting is selected. Other settings can be chosen if needed for your asset tracking solution.

Parameter	Default	Other available settings
When is a start detected?	Medium start sensitivity: A start is detected when the asset moved in 2 consecutive slots of 20 seconds.	High start sensitivity: A start is detected when the asset moved in 1 slot of 20 seconds.
Are more locations captured by departure?	No, same location capture during departure.	Yes, more frequent location captures during departure.
Are locations captured while moving?	No, locations are not captured while moving.	Yes, • Every 10 minutes • Every 15 minutes • Every 20 minutes • Every 40 minutes • Every hour • Every 3 hours • Locations are sent while moving, almost real-time (location is captured every 5 min and send every 20 km travelled OR > 45 degree change OR every 30 min) – most real-time • A detailed log of locations is kept (location is captured every 10 min and are send every hour)
When is a stop detected?	A stop is detected when the asset has not moved for at least 30 minutes.	A stop is detected when the asset has not moved for: • at least 5 minutes • at least 10 minutes • at least 1 hour
Periodic location capture?	Every 24 hours	• Off • Every 12 hours • Every 48 hours
Scheduled location capture?	Off	• Every day at midnight 12 AM UTC • Every day at 6 AM and 6 PM UTC

HOW are locations determined?

By default the tracker first scans for installed geobeacons to determine a location. If no geobeacons are found, the second choice is to scan for GPS signals to determine a location. If the GPS location capture fails, Wi-Fi localisation is used to get a location. If this also fails, a network location is captured.
Optionally, geobeacon and Wi-Fi localization can be disabled.

Parameter	Default	Other available settings
What are the localization technologies?	Geobeacon → GPS → Wi-Fi² → Network	• Geobeacon → GPS → Network • GPS → Wi-Fi² → Network • Wi-Fi² → GPS → Network • GPS → Network
What is the GPS precision (CEP)?	Standard precision on stop (25 meters)	Higher precision on stop (4 meters [1])

Battery saving options

When your asset travels outdoor and indoor it is a good idea to configure the GPS in such way that the battery last as long as possible. Select the correct usage to optimize battery lifetime.

Parameter	Default	Other available settings
Preserve battery saving while using GPS?	On, best for combined indoor-outdoor usage	• Off, best for outdoor usage • Generic battery saving mode, for assets most time indoor

HOW is additional sensor information measured?

Optionally, different types of sensor information can be monitored by connecting BLE sensors to the tracker or by using the internal temperature sensor. It can then be chosen how often the measurements are done, and how often they are sent to the cloud.

It is also possible to use the internal orientation sensor to:

- Detect how an RTP is positioned.
- Know a specific state (lid open/closed, RTP folded or not).

Parameter	Default	Other available settings
Internal temperature sensor activated? What are the measurement and sending intervals?	Off	• Measure every hour, send an update every day with 24 measurements • Measure every 5 hours, send an update every 6 hours with 24 measurements • Measure every 5 minutes, send and update every 3 hours containing 18 measurements • Measure every 5 minutes, send an update every 5 hours on 5 degrees change
Which measurement from the internal temperature is send?	Average	• Maximum • Minimum • Last monitored value
External sensors connected?	Off	On, • Temperature • Humidity • Temperature and humidity • Magnet • Distance PCR
Measurement and sending intervals of external BLE sensors?	If sensors attached: Measure every hour, send every day with 24 measurements	• Measure every hour and send an update every 6 hours with 6 measurements • Measure every 30 minutes and send an update every 3 hours with 6 measurements • Measure every 10 minutes and send an update every 3 hours with 18 measurements • Measure every 10 minutes, send an hourly update with 6 measurements • Measure every 5 minutes and send an update every 30 minutes with 6 measurements
Orientation monitored?	Off	• Standard postions (reports the side of the tracker that faces up) • Open/close (requires vertical postion of the tracker when open and horizontal position when closed. [3] • Anti-tamper functionality
Immediate orientation change update?	Off	On, location update sent by orientation change

Other parameters

Defines whether or not the tracker constantly emits a BLE (Bluetooth Low Energy) signal so that it can be detected by zone anchors and mobile phones nearby.

Parameter	Default	Other available settings
BLE advertisments to make your tracker visible to smartphones and zone anchors	Off	On

[1] In 80% of the cases
[2] Comes with an extra cost
[3] Contact Sensolus for more options

Want a customized tracker usage profile?

Contact Sensolus sales.