



## Tramigo T23 Track Technical Data

### Industry benchmark footprint and functionality

|                           |                        |  |
|---------------------------|------------------------|--|
| <b>Target Segment</b>     |                        | Cars and personal security   |
| <b>GPS</b>                | Receiver type          | Telit JF2, SiRF 4  |
|                           | Number of Channels     | 48 tracking  |
|                           | Navigation sensitivity | Acquisition -147 dBm, tracking -163 dBm, cold start <35 s, hot start 1 s               |
|                           | A-GPS                  | CGEE   |
|                           | Antijamming            | Remove interference from up to 8 jammers   |
| <b>GSM / GPRS</b>         | Modem type             | Sierra Wireless Wismo 228 GSM/GPRS (Multi slot class 10, Terminal B)                   |
|                           | Frequencies            | 850 MHz, 900 MHz, 1800 MHz, 1900 MHz   |
|                           | Communication          | SMS, TCP, UDP  |
|                           | SIM card type          | Normal   |
| <b>MCU</b>                | Processor              | ARM Cortex-M3  |
|                           | Code Memory            | 786 kbytes (total code memory)   |
|                           | RAM                    | 96 kbytes (total RAM)  |
|                           | Data flash             | 16 Mbytes (total data flash)   |
| <b>Audio</b>              | Microphone             | No (Microphone variants possible)  |
| <b>User interface</b>     | Buttons                | Power button   |
|                           | LEDs                   | 3 status LEDs for Power, GPS and GSM   |
| <b>Connectivity</b>       | Power and IO           | GPIO (Power and I/O connectors) and Micro USB (Power and data)                         |
| <b>I/O Features</b>       | Inputs                 | 1 Dedicated<br>2 Switch *<br>1 Digital *   |
|                           | Outputs                | 1 Digital<br>1 Dedicated Immobilizer *   |
|                           | I/O cable type         | 5 wires or 12 wires Molex 43045-1200   |
| <b>Antennas</b>           | GPS                    | Internal GPS   |
|                           | GSM                    | Internal quad band antenna   |
| <b>Sensors</b>            | Onboard                | Shock, 3D accelerometer, temperature   |
| <b>Power</b>              | Consumption            | Operation: Typical 40-90 mA, Standby: 1 mA   |
|                           | Input voltage          | 6 - 32 DC  |
| <b>Battery</b>            | Li-ion                 | 1300 mAh Note: Internal backup battery   |
|                           | Operation time         | Typical 1 day, depends on user profile and conditions<br>Standby up to 50 days         |
| <b>Software features</b>  | Communication          | SMS and GPRS with message buffering on data flash                                      |
|                           | Over-the air updates   | Configuration, parameters, firmware including application                              |
|                           | Landmark database      | Landmark databases for many countries, containing whole continent (check availability) |
| <b>Temperature range</b>  | Operation              | -20 - +80 °C, Li-ion discharge -20 - +60 °C, Li-ion charge 0 - +45 °C                  |
| <b>Certifications</b>     |                        | RoHS, CE 2004/108/EC, 99/5/EC  |
| <b>Available versions</b> |                        | Flash size variants, Landmark Database, language, casing                               |
| <b>Dimensions</b>         |                        | 100 mm x 60 mm x 21 mm   |
| <b>Weight</b>             |                        | 120g (with battery), 90g (without battery)   |

\* Optional