

HELIOS SERIES – ADVANCED (FORMERLY HELIOS PRO / ADVANCED)

# Helios M Pro

4G

4G GPS tracker with CAN bus reading, fuel sensor support and a standalone alarm system – full fleet management and vehicle security.



## Key features

-  Full fleet management and security features
-  CAN bus reader
-  Fuel sensor support
-  Can be used as a standalone alarm system with immobilizer
-  Custom events via the Helios event generator
-  Over-the-air configuration and firmware upgrade
-  BLE 5.0 for wireless sensors
-  Voice communication and SOS button
-  Geofencing, SMS and e-mail alerts



WEIGHT  
150 g (5.29 oz)



DIMENSIONS  
21 × 60 × 107 mm



I/O  
4 in / 4 out / 4 analog



OPERATING TEMP.  
-40 °C ~ +60 °C

## Applications



# Technical specifications

| Cellular communication    |                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Modem                     | 4G Cat-1, GSM/GPRS                                                                                                       |
| LTE bands                 | EU: B1, B3, B5, B7, B8, B20, B28 (700/800/850/900/1800/2100/2600 MHz)<br>Latin America: B2, B3, B4, B5, B7, B8, B28, B66 |
| Antenna type              | Built-in (concealed) + external GPS and 4G antenna ports                                                                 |
| Data channels / protocol  | SMS, TCP/IP; proprietary, encrypted                                                                                      |
| Bluetooth                 | BLE 5.0, 2.4 GHz                                                                                                         |
| Location                  |                                                                                                                          |
| Receiver type             | 50 channels, GPS L1 C/A; SBAS: WAAS, EGNOS, MSAS                                                                         |
| Sensitivity               | -162 dBm                                                                                                                 |
| Horizontal accuracy       | GPS 2.5 m; SBAS 2.0 m; SBAS + PPP < 1 m (2D, R50)                                                                        |
| TTFF                      | 1 s (hot), 1 s (warm), 27 s (cold)                                                                                       |
| Positioning accuracy      | 2.5 m CEP (50%), velocity 0.1 m/s                                                                                        |
| I/Os and ports            |                                                                                                                          |
| I/O ports                 | 4 digital inputs, 4 digital outputs, 4 analog inputs                                                                     |
| 1-Wire                    | 2 one-wire ports                                                                                                         |
| Speaker & microphone      | 4 ports for voice communication                                                                                          |
| SOS button                | 1 switch input                                                                                                           |
| COMM ports                | 2× RS232, 1× RS485; USB for configuration                                                                                |
| CAN bus                   | Yes                                                                                                                      |
| Accelerometer and alarm   |                                                                                                                          |
| Accelerometer             | 3-axis, 20 mg accuracy, up to 8 g – impact and accident detection                                                        |
| Immobilizer               | External – gradual stop                                                                                                  |
| Disarming options         | Keypad, Dallas key                                                                                                       |
| General                   |                                                                                                                          |
| Dimensions                | 21 × 60 × 107 mm (0.82" × 2.36" × 4.21")                                                                                 |
| Weight                    | 150 g (5.29 oz)                                                                                                          |
| Consumption               | 3 mA in low power mode; up to 120 mA in operation; up to 300 mA while charging                                           |
| Backup battery (optional) | Lithium-ion polymer 1100 mAh / 3.75 V                                                                                    |
| Operating temperature     | -40 °C ~ +60 °C (-40 °F ~ 140 °F)                                                                                        |
| Storage temperature       | -40 °C ~ +85 °C (-40 °F ~ 185 °F)                                                                                        |
| Humidity                  | Max. 90%                                                                                                                 |