

Pointer by Powerfleet Micromobility Solution

CR-100

Compact, LTE-BASED Micromobility Device with BLE Connectivity

The CR-100 is Pointer's cost-effective and high-quality fleet and security management product. With a wide input voltage range of 9 to 90 volts and a CAN interface, it is designed to accommodate various vehicle types, including two/three-wheeled lightweight vehicles such as scooters and e-bikes, as well as traditional cars and trucks. Its compact form factor, IP67 protection, and built-in non-removable harness ensure easy installation and make it suitable for challenging environments.

The CR-100 also includes GNSS for location tracking, in addition to collision detection, basic driver behavior capabilities and built-in motion sensors to enable movement and towing detection to ensure improved compliance with vehicle security requirements.



Key Features

- LTE CAT-1 with 2G fallback (EMEA, APAC, LATAM)
- Built-in BLE connectivity
- Rechargeable backup battery
- IP67 – suitable for rough, outdoor environmental conditions
- CAN interface to enable a wide range of applications driven from the vehicle CANBUS data (vehicle status, fuel level, tire status etc.)
- Dual color LED for Cellular/GNSS installation validation indication
- Basic driver behavior monitoring capabilities including harsh acceleration, harsh braking, harsh turn, over speeding and accident detection
- Up to 50 Geo-Fences
- 1-wire interface for driver authentication
- Built-in motion sensor for movement & towing detection.
- Memory that can store up to 7,300 logged events
- Advanced capabilities including:
 - Crash Detection
 - Odometer
 - Jamming Detection
 - Tilt Tamper
 - Immobilization



Technical Specifications:

Cellular Communication		
Cellular	LTE CAT-1 with 2G fallback (EMEA)	LTE CAT-1 with 2G fallback (Australia/ Latin America)
Supported Technologies & Bands	<ul style="list-style-type: none">• LTE-FDD: B1/ 3/ 5/ 7/ 8/ 20/ 28• LTE-TDD: B38/ 40/ 41• GSM(2G): B2/ 3/ 5/ 8	<ul style="list-style-type: none">• LTE-FDD: B1/ 2/ 3/ 4/ 5/ 7/ 8/ 28/ 66.• LTE-TDD: B38/ 40/ 41• GSM(2G): B2/ 3/ 5/ 8
Regulatory	<ul style="list-style-type: none">• Europe: CE• Australia/New Zealand: RCM	<ul style="list-style-type: none">• America: FCC• Brazil: Anatel
Data Rates	<ul style="list-style-type: none">• LTE-FDD (Mbps): 10 (DL)/ 5 (UL)• LTE-TDD (Mbps): 8.96 (DL)/ 3.1 (UL)• GSM/2G (kbps): 85.6 (DL)/ 85.6 (UL)	
SIM Card Compatibility	Nano SIM and e-SIM (Optional).	
Antenna	Internal	
Packet Data	TCP/IP, UDP/IP	
SMS	PDU	
Local Communication Interfaces		
BLE	BLE 4.2, Wireless Connectivity	
Wi-Fi	2.4 GHz 11b (RX). Wi-Fi Scan only (optional, Used for positioning purposes)	
Serial Communication	TTL for Configuration and firmware upgrades.	
1-Wire™ (Dallas) Input	DS1990A, DS1971 compliant for driver management	

GNSS	
GNSS	GPS, BeiDou and Galileo
Sensitivity (Tracking)	-160 dBm
Acquisition Average TTFF	Cold Start: < 30s, Hot Start: < 2s
Antenna	Internal
Inputs and Outputs	
D I/O	2
Analog Inputs	2
Ignition switch input	1
CAN HS	1 (CAN2.0 ISO 11898, J1939, FMS)
Accelerometer	
Internal	3D, +/- 32g range, 14-bit representation, 1mg resolution
Display	
LED Indicators	GNSS, Cellular Connectivity and power status LED.
Power	
Input Voltage (Vehicle Power)	9-90 VDC
Internal Backup Battery	Li-Ion Polymer, 3.7V, 200mAh, rechargeable.
Applicable Environmental Conditions	
Operating Temperature	-30°C to +70°C full performance (External Power)
Storage Temperature	-20°C to +45°C
Humidity	95% non-condensing
Protection	IP65 (in process to acquire IP67)
Climatic, Vibration, Impact	ISO 16750
Dimensions and Weight	
Dimensions	90 x 43.9 x 24.4 mm
Weight	88gr (with harness and battery)