

# CR4000



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Embedded FDD LTE and WCDMA UMTS/HSPA Module

Embedded GPS and GSM Antennas

RS485 Bus Compatible Custom Accessories

Multiple Digital Input, Anlage Input and Output

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CR4000 is a GPS location service supplier for vehicle. It provides superior sensitivity up to -165dBm and fast Time-To-First-Fix GPS application and support FDD LTE and WCDMA UMTS/HSPA+. The device could be monitored by backend server or other specified terminals.

CR4000 has multiple input/output interfaces that can be used to monitor vehicle status or control external device. User can setup device working parameter by PC setup program base on personality application.

CR4000 embedded with high sensitivity GPS antenna and GSM antenna.

CR4000 has RS485 bus, support fuel sensor, camera and other custom accessories.

## Advantages:

- ◇ CR4000E: • FDD-LTE B1/B3/B7/B8/B20
  - Dual-Band UMTS/HSDPA/HSPA+ B1/B8
  - GSM/GPRS/EDGE 900/1800 MHz
- ◇ CR4000A: • Tri-Band FDD-LTE B2/B4/B17
  - Dual-Band UMTS/HSDPA/HSPA+ B2/B5
- ◇ High sensitivity -165 dBm (Tracking)
- ◇ Embedded GPS and GSM Antennas
- ◇ RS485 Bus Compatible Custom Accessories
- ◇ Multiple Digital Input, Anlage Input and Output
- ◇ Internal Battery, 3.7V, 500mAh
- ◇ DC Tolerance voltage, from 8V to 32V
- ◇ Firmware update: Update over the air



## CR-GPS

### ◇ GSM Specifications

Frequency	CR4000E: FDD-LTEB1/B3/B7/B8/B20 UMTS/HSDPA/HSPA+ B1/B8 GSM/GPRS/EDGE 900/1800 MHz  CR4000A: Tri-Band FDD-LTE B2/B4/B17 UMTS/HSDPA/HSPA+ B2/B5
Specifications for Data transfer	<ul style="list-style-type: none"> <li>•LTE CAT1 – Uplink up to 5Mbps, - Downlink up to 10Mbps</li> <li>•HSPA+ Uplink up to 5.76 Mbps, - Downlink up to 42 Mbps</li> <li>•UMTS Uplink/Downlink up to 384Kbps</li> <li>•EDGE Class Uplink/Downlink up to 236.8Kbps</li> <li>•GPRS Uplink/Downlink up to 85.6Kbps</li> </ul>
Stability of Frequency	<2.5ppm

### ◇ GPS Specifications

GPS chipset	MT3337 GPS chipset
Receiver Accuracy	Without aid:3.0 M 2D-RMS DGPS(WAAS, EGNOS, MSAS, RTCM):2.5 M
Time to First Fix	Hot start < 1 sec. Warm start < 30 sec. Cold start < 31 sec.
Sensitivity	- 165 dBm (Tracking)

### ◇ Interfaces

GPS antenna	Internal and external, switch automatic
GSM antenna	Internal only
Internal Indicator LED	Internal, GPS,GSM, Power status
Digital Input	3
Anlage Input	2

Output	3
RS485 Bus	Camera, RFID reader and Compatible Custom Accessories
PC Setup Interface	Update firmware and setup device

### ◇ General Specifications

Device Mechanics	108mm(L)*74mm(W)*32mm(H)
DC Tolerance	8V to 32V
Battery	Li-Po 3.7V 500mAh
Current	GPRS online 40mA GPRS transmit 80mA GPRS peak 120mA
Operating temperature	-20 to 60 °C

### ◇ Communication Protocol

Transmit protocol	TCP,SMS
Alarm Report	ACC trigger Power cut Tow report Speeding
Special Report	PTO Fuel level Flow meter
Picture upload	FTP protocol
Firmware Update	Over the Air