

# Technical Specification & description

## 1. General Features

- CDMA 2000 1xRTT
- IS-95A/B/C
- Standard RS-232E interface
- Data transmission up to 153Kbps
- Remote control by AT command
- Built-in TCP/IP/UDP stack
- 2-way SMS
- Voice, Enhanced variable rate codec (EVRC)
- Quick Net Connect for fast Internet connection
- Telemetry-specific features
- Optimized for easy OEM applications
- Supports Circuit Data/Fax

## 2 Technical Specifications

### 2.1 General Specifications

PARAMETERS	DESCRIPTIONS
External Access	Code-Division-Multiple-Access (CDMA)
CDMA Protocol	IS-95 A/B, IS-126, IS-637A, IS-707A, IS-2000
Data Rate	153.6Kbps
Transmit/Receive Frequency Interval	45MHz for Cellular and 80MHz for PCS
Band Width	1.23MHz
Operating Voltage	DC 7V ~ 16V
Current Consumption	Sleep mode : 30mA, Idle mode (70mA) , Traffic mode : 350mA (Max) at 12V
Operating Temperature	-30 °C ~ +60 °C
Frequency Stability	±300Hz for 800MHz CDMA and ±150Hz for 1900MHz CDMA
Antenna	Magnet mount helical antenna, 50ohm, 1dBi Gain for 800MHz and 1900MHz, -4dBi for 1575MHz
Size	60 X 112 X 29mm
Weight	About 110g
External Interface	RS-232, Analog audio, Power, Antenna, Debug port

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## 2.2 Receive Specifications

PARAMETERS	DESCRIPTIONS
Frequency Range	869.04 ~ 893.97 MHz for 800MHz CDMA and 1931.25 ~ 1988.75MHz for 1900MHz CDMA
Sensitivity	Below -104dBm
Interference Rejection	Single tone (-30dBm @900KHz): Below -101dBm for 800MHz Single tone (-30dBm @1250KHz): Below -101dBm for 1900MHz
Spurious Wave Suppression	Below -80dBc
Input Dynamic Range	-25dBm ~ -104dBm

## 2.3 Transmit Specifications

PARAMETERS	DESCRIPTIONS
Frequency Range	824.04 ~ 848.97 MHz for 800MHz CDMA and 1851.25 ~ 1908.75MHz for 1900MHz CDMA
Nominal Max. Power	0.32 W (24.7dBm)
Peak Power in Operation Mode	0.35W (25.5dBm)
Minimum Controlled Output Power	Below -50dBm
Max Power Spurious	900KHz: Below -42dBc/30KHz 1.98MHz: Below -54dBc/30KHz 1250KHz : Below -42dBc/30KHz 1.98MHz: Below -50dBc/30KHz

## 2.4 Serial Interface Electrical Specifications

PARAMETER	MIN	MAX	UNITS
Input High Voltage	+2	+15	V
Input Low Voltage	-15	-2	V
Output High Voltage	+5	+7	V
Output Low Voltage	-7	-5	V

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## 2.5 gpsOne Receiver Specifications

Parameters	Descriptions
Frequency Range	L1, 1575.42MHz
C/A Code	1.023MHz Chip Rate
Receiver Sensitivity	-152dBm

## 3 Standards

- IS-95 A/B: Protocol Between MS & BTS
- IS-96A: Voice Signal Coding
- IS-98A: Base MS Function
- IS-126: Voice Loop-Back
- IS-637: Short Message Service
- IS-707: Data Service
- Built-in TCP/IP : AnyDATA proprietary software
- IS-657 : packet data