

Sony Ericsson



CM42



Making Machines Talk Reliably to Make Your Business Grow

- Dual Band Dual Mode AMPS 800MHz, CDMA 800/1900MHz
- HSPD (1xRTT up to 154 kbps)
- CSD 14.4kbps
- SMS MO/MT
- Analog and PCM Digital Audio
- Automotive Environment
- -40°C to +85°C Operation
- QS 9000 Manufacturing
- Optional SiRFstarII™ GPS

The CM42 Cellular Communication Unit from Sony Ericsson was designed for applications using CDMA2000 1xRTT and AMPS networks. It creates new opportunities for business productivity enhancements and opens the door to the creation of new businesses and revenues.

The CM42 is dual mode and dual band. It communicates over AMPS 800 (3-Watt), CDMA 800 and 1900. This combination of cellular modes translates into highly reliable connectivity in rural as well as urban areas.

This unit is intended for use as an integral part of application solutions involving analog or PCM Voice as well as wireless data services using CSD, HSPD, and SMS.

Rugged and reliable enough for the automotive environment, the CM42 was designed as a general purpose unit, to be easily integrated into a wide range of industrial and commercial wireless solutions. Target market segments are fleet management, asset tracking, automotive cellular, automotive security & safety, security alarms, telemetry, and metering.

Designed with future enhancements in mind, the CM42 includes the option of the SiRFstarII™ GPS chipset solution right on-board.

Feature Highlights

- Dual Band Dual Mode (800/1900-AMPS/CDMA2000)
- Digital PCM and Analog Audio
- Vocoder: Full Duplex FR/EFR
- Echo Cancellation and Noise Suppression
- MO/MT SMS - PDU and Text Modes
- Data Rates (IS-707)
 - Async Data (CSD) 9.6 to 14.4 kbps
 - Fax (CSD) 9.6 to 14.4 kbps
 - Packet Data to 153 kbps
- OTA Activation and Provisioning
- Optional SiRFstarII™ GPS/DGPS
- AT Command Set: ITU V.25ter with Enhancements
- Carrier Service Support
 - Caller ID
 - Call Forwarding
 - Call Waiting
 - 3-Party Conference Calling
 - Call Diversion
 - Voice Mail

Power

- 5-Volts +/- 10% @ 1 A max.
- 13.8-Volts +/- 20%, @ 1 A max (for Class I Amps in Tx)

Developers Kit

- CD-ROM
 - Extensive Integration Manual
 - Software
- Cellular Communications Unit
- Developer's Platform
- Antenna
- Power Supply
- Cables

Network Standards

- Standards and supported classes
 - CDMA 800 Class III
 - CDMA 1900 Class II
 - AMPS
 - Class I, 3-Watt continuous
 - Class IV
- Air Interfaces
 - IS-2000-1xRTT Packet Data
 - IS-95 A/B Voice and CSD
 - Tia/E1A-553
 - IS 683A OTA/OTP

Connections

- Standard 40-pin DIP connector for board-to-board or Ribbon
- FAKRA Automotive Standard Antenna Connector
- Compatible with multiple types surface mount and thru-hole RF connectors

Physical Characteristics

- 155.7 x 49.5 x 11.9mm
- 68.2 grams

Environmental

- -40°C to +85°C Operating Temperature Range
- Shock Resistance: 20G Half Sine, 11ms
- Vibration Tolerance
 - 0.04(G²/Hz); 10Hz
 - 0.10(G²/Hz); 20Hz & 100Hz
 - 0.002(G²/Hz); 800Hz & 1KHz

Quality

- Certified to the international standard ISO 9001
- QS9000 Manufacturing

Note: SiRF, SiRFstar are registered trademarks of SiRF Technology, Inc.



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