EDMI

EWM100
Advanced GSM/GPRS Modem for Smart Metering Applications

COMMUNICATIONS SERIES

PRODUCT INFORMATION

Utilising the latest Sierra Wireless AirPrime wireless module with Embedded SIM® capability, the EWM100 is a robust GSM/GPRS modem specially developed for the smart metering market. The EWM100 is designed for highly reliable machine-to-machine communications, with very low standby power consumption.

KEY FEATURES

AMI				
AMI READY	PROVEN RELIABILITY	FLEXIBILITY	HIGH PERFORMANCE	LOW POWER CONSUMPTION

EWM100 ◖◗ **COMMUNICATIONS** SERIES

Advanced GSM/GPRS Modem for Smart Metering Applications

SPECIFICATIONS

Interface

- GSM Quadband (850/900/1800/1900)
- GPRS Class 10
- Antenna: FME Male Connector
- Input Voltage Range: 4.75 to 32V
- Micro-Fit™ 8-pin Data Cable Connector
- Flash LED Indicator
- UART: 1
- Real Time Clock (RTC)
- SIM Interface: 1.8V/3V

Electrical

- Supply Voltage: 4.75V to 32V
- Supply Current @ 12V
  - GSM900: 19mA Idle, 44mA in Call
  - GSM1800: 19mA Idle, 42mA in Call

Compliance

- RoHS Compliant
- CE GCF Certified
- A-Tick Certified

Features

- Siera Wireless AirPrime module: WMP100
- SMS, Fax, CSD, Auto Reset

Cellular Performance

- Bearers: GSM + GPRS Class 10
- Radio Bands: Quadband 850/900/1800/1900
- Nominal Sensitivity
  - 850/900MHz Rx: -109dBm
  - 1800/1900MHz Rx: -108dBm
  - 850/900MHz Tx: 33dBm -1/+2 (2W)
  - 1800/1900MHz Tx: 33dBm -1/+2 (2W)
- Intellectual Property Rights included

CPU Performance

- Processor: ARM946/DSP
- Core Frequency (VariSpeed): 104MHz/26MHz
- User MIPs Available/GSM Stack Active: 87MIPs
- Application Flash/RAM: 1.5M/256KBytes

Embedded SIM® CAPABLE

- The Embedded SIM® is an industrial-grade sim for industrial devices. It can operate in extreme temperature, high humidity and resist vibration

Other Features

- ME + SIM Phonebook Management
- Fixed Dialling Number
- SIM Toolkit Class 2
- Alarm Management
- UCS2 Character Set Management
- Firmware Upgrade via X-modem

Memory

- Flash: 1.5MBytes
- RAM: 256KBytes

Physical Dimensions

- Approx. 67mm (L) x 52mm (W) x 24mm (D)
- Weight: Approx. 62g

Development Environment

- C Compiler
  - Remote Task Environment
  - Traces
  - Break Point

Environmental

- Operating Range: -30°C to +75°C
- Relative Humidity: Up to 90% non-condensing for 30 days

Software

- The Open AT® application framework enables to develop,compile, test, debug, download and natively execute applications written in standard ANSI C
- TCP/IP: Socket Layer, UDP, TCP
- Internet: FPT, HTTP, SMTP, POP3, DNS, MMS
- Download Over The Air (DOTA)
- AirVantage Management Services

LED Indicator & SIM Card Socket

Data Cable & Antenna Connector