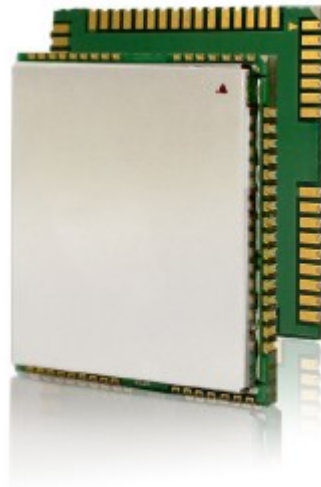


BRIEF

The E12M is a complete Quad-band GSM/GPRS solution in an SMD type which can be embedded in customer application, offering the highest reliability and robustness.

Featuring an industry-standard interface, the E12M delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with extremely low power consumption. With a tiny configuration of **29mm x 29mm x 3.6mm**, the E12M can fit into almost all the M2M applications, including VTS, Smart Metering, Wireless POS, Security, etc.



FEATURES

Quad-band GSM/GPRS module with a size of 29mmx29mmx3.6mm

SMD type suits for customer application

Embedded powerful Internet service protocols

Based on mature and field-proven platform, backed up by our support service, from definition to design and production

Full DTU function supported

WDSP protocol Support

2 ways Digital I/O port

2 tunnels relay output

Remote firmware upgrade over the air (OTA)

1 serial port special for data transferring with transparent mode

1 serial port special for AT command & Debugging

Connect to any serial device to GPRS and the Internet

Reliable GPRS network connectivity, providing fast and cost-effective long-range

Always-On-Line/on Demand mode

Sleep mode supported

wake up Remotely (SMS or Voice call)

Local and remote configuration over the air

Multi-destination IP supported



Quad Band



Highly Compact Size



RoHS Compliant



GPRS Multi-slot Class 12



SMD Type



Serial Port
Multiplexer (GSM0710)



Extended Temperature
Range -45 °C to +85 °C



Embedded Internet
Services Protocols



Forwell Enhanced AT
Commands

SPECIFICATION

GENERAL FEATURES

Quad-Band	850/ 900/ 1800/ 1900 MHz
GPRS Multi-slot Class	12/10/8
GPRS Mobile Station	class B
Compliant to GSM Phase 2/2+	Class 4 (2W @850/ 900 MHz)
Class 1 (1W @1800/1900MHz)	
Supply Voltage Range	3.4~4.5 V 4.0V nominal
Low Power Consumption	1.1mA @ DRX=5
0.7mA @ DRX=9	
Operation Temperature	-45 °C to +85 °C
Dimensions	29mm × 29mm × 3.6mm
Weight	Approx 6g
Control via AT commands (GSM 07.07 ,07.05 and other enhanced AT Commands)	

SPECIFICATIONS FOR DATA

GPRS Class 12 max. 85.6 kbps (uplink & downlink)

PBCCH Support

Coding Schemes CS 1, 2, 3, 4

CSD up to 14.4 kbps
 USSD
 Non Transparent Mode & Transparent Mode
 Protocols PPP
 TCP/IP
 HTTP
 FTP
 MMS

INTERFACES

External SIM 3V/ 1.8V
 Analog Audio Interfaces Two channels
 RTC Backup
 Serial Port and Debug Port
 Antenna Pad
 4 GPIOs

PRODUCT MODEL

E12M1 GPRS DUAL BAND DTU MODULE

E12M2 GPRS QUAD BAND DTU MODULE

