

# g20

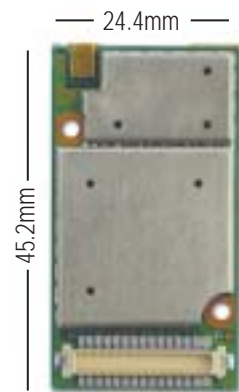
## Embedded GSM/GPRS 850/1800 & 900/1800 MHz. Solution

*The Motorola g20 is an innovative GSM embedded module, utilizing the most advanced technology for the data and voice communications market*

This new GSM/GPRS cellular module is extremely small and packed with many highly advanced features that were designed to facilitate fast and easy integration with the OEM user product.

The g20 module is ideally suited for the automotive, telemetry, security, EPOS industries, delivery and hand-held terminal markets.

Like all Motorola's products, g20 was designed to the highest standards of quality.



### Product Highlights

#### GSM bands

- EGSM 900/1800 MHz
- GSM 850/1900 MHz

#### GPRS Multi-slot class 8

#### Small Size

- 45.2 x 24.4 x 6.0 mm

#### MO/MT SMS

#### FAX

#### TCP/IP stack

#### STK over RS232

#### Application Programming Interface (API)

#### Wide functional temperature range

### Product Features

#### Operating systems

- EGSM 900/1800 MHz
- GSM 850/1900 MHz

#### Physical

- Size: 45.2x24.4x6.0 mm
- Mounting: Two 2.2mm holes
- Weight: 11.9 gram

#### Environmental

- Operating temperature: -20°C +60°C
- Functional temperature: -20°C +70°C
- Storage temperature: -40°C +85°C

### Performance

#### Operating Voltage

- Voltage: 3.0 - 4.2 V

#### Current consumption

- < 2.5mA @DRX9 (Idle mode)

#### TX Power

- .6W 850 MHz
- 2W 900 MHz
- 1W 1800/1900 MHz

### Interfaces

#### Connectors

- Single 70 pin board to board
- RF MMCX

#### SIM Card

- Local SIM connectivity
- 32K SIM
- 1.8 - 3.0V

#### Serial

- RS232
- BR from 300 bps to 115 Kbps
- Auto BR from 300 bps to 115 Kbps
- USB

### Data Features

#### GPRS

- Multi slot class 8 (4 up; 1 down)
- Max BR 85.6 Kbps
- Class B GSM 07.10 multiplexing protocol
- Coding Scheme CS1-CS4

#### CSD

- Max BR 14.4 Kbps

#### SMS

- MO / MT Text and PDU modes
- Cell broadcast

#### FAX Class 1

### Voice Features

- Telephony
- Digital audio
- Differential analog audio lines
- Vocoders EFR/ER/FR/AMR
- DTMF support
- Audio control: echo cancellation; noise suppression; side tone; gain control

### GSM Supplementary Service

- USSD phase II
- Call Forwarding
- Call hold; waiting; multiparty
- Call diverting
- Missed call indicator
- AOC
- Call barring

### Character set

- UTF8
- UCS2

### Control / Status indications

- GPRS coverage
- Wake up
- Antenna detect

### Features over RS232

- Embedded TCP/IP stack
- STK class II

### User Application

- Application Programming Interface (API)
- 12 GPIO lines
- 2 A/D lines

### Emergency & Location

- FCC E911 Phase II Location mandate using EOTD

### AT Command Set

- GSM 07.05
- GSM 07.07
- Motorola proprietary AT commands

### Accessories

- Firmware data loader
- Data logger
- Developer Kit

### Regulatory and Approvals

- FTA, FCC, DOC, PTCRB
- R&TTE
- GCF
- EMC
- BABT

Specifications subject to change without prior notice.

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