

## INTRODUCTION

Both data and voice interfaces are available on the SIMCom/OGO range of compact Wireless Modules. They provide a cost effective means of connecting to the GSM/GPRS network and have an embedded TCP/IP protocol stack. Standard AT Commands are used to control the modules which make them compatible with most other brands. In addition a second serial port is available for real time monitoring. They operate on both quad-band and tri-band RF frequencies.

Application include:

- Machine to Machine Monitoring (M2M)
- Telematics
- Telemetry and Tele-command
- Automatic Meter Reading (AMR)
- Asset Tracking,
- Stock Control
- Environmental Monitoring

## SIM340 Quad-Band GSM/GPRS Module

- Quad-Band GSM/GPRS 850/900/ 1800/ 1900MHz
- GPRS multi-slot class 8/10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- - Class 4 (2 W @ 850/900 MHz)
- - Class 1 (1 W @ 1800/1900MHz)
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Normal operation temperature:-20°C to +55°C
- Standard Entry board-to-board connector
- Dimensions: 40mm x 33mm x 2.85 mm



## SIM340D Quad-Band GSM/GPRS Module

- Quad-Band GSM/GPRS 850/900/ 1800/ 1900MHz
- GPRS multi-slot class 8/10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- - Class 4 (2 W @ 850/900 MHz)
- - Class 1 (1 W @ 1800/1900MHz)
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Normal operation temperature:-20°C to +55°C
- SM Board-to-Board Connector.
- Dimensions: 33mm x 33mm x 3mm,



### WARWICK WIRELESS LIMITED

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## SIM548 Quad-Band GSM/GPRS+GPS Module

### GSM/GPRS Specification

- Quad-Band 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- Class 4(2W @ GSM850/GSM900MHz)
- Class 1(1W @ GSM1800/GSM1900MHz)
- Control via AT commands
- SIM application tool kit
- Supply voltage range: 3.4V -4.5V
- Normal operation temperature:-20°C to +55°C
- Dimensions: 34mm x 55mm x 3 mm

### GPS Specification

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023MHz chip rate
- Accuracy Position 10 m CEP,
  - without SA/Velocity 0.1m/s,
  - without SA/Time 1 s synchronized to GPS time
- DGPS accuracy 1 to 5m, typical, 0.05m/s, typical
- Date WGS-84
- Acquisition rate(TTFF defined at 95% of first position local station)
  - Hot start < 1s, average, open sky
  - Warm start < 38s, average, open sky
  - Cold start < 42s, average, open sky
- Protocols
  - NMEA-0183
  - SiRF binary
  - RTCM SC-104
- Memory: On-chip 4Mbit FLASH and 1Mbit SRAM



## SIM600 Quad-Band GSM/GPRS/EDGE Module

- Quad-Band GSM/GPRS 850/ 900/ 1800/ 1900 MHz
- GPRS/EGPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900 MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- Dimensions: 54\* 33\*3.0 mm
- Weight: 8 g
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4 ~ 4.5 V
- Normal operation temperature:-25°C to +55°C
- Dimensions: 54mm x 33mm x 3 mm



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## SIM300 Tri-Band GSM/GPRS Module

- Tri-Band GSM/GPRS 900/1800/1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 900 MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Normal operation temperature:-20°C to +55°C
- Standard Entry board to board connector
- Dimensions: 40mmx33mmx2.85 mm



## SIM300C Tri-Band Plug in GSM/GPRS Module

- Tri-Band GSM/GPRS 900/1800/1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 900 MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Normal operation temperature:-20°C to +55°C
- Low power consumption
- DIP Board to Board Connector.
- Dimensions: 50mmx33mmx6.2mm



## SIM300D Tri-Band Mini Footprint GSM/GPRS Module

- Tri-Band GSM/GPRS 900/1800/1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2W @ 900 MHz)
  - Class 1 (1W @ 1800/1900MHz)
- Control via AT commands
- SIM application toolkit
- Supply voltage range 3.4V...4.5V
- Low power consumption
- Normal operation temperature:-20°C to +55°C
- SM Board to Board Connector.
- Dimensions: 33mm x 33mm x 3mm,



## SIM508 Tri-Band GSM/GPRS+GPS Module

### GSM/GPRS Specification

- Tri-Band 900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- Class 4(2W @ GSM900MHz)
- Class 1(1W @ GSM1800/GSM1900MHz)
- Control via AT commands
- SIM application tool kit
- Low power consumption
- Supply voltage range: 3.4V -4.5V
- Normal operation temperature:-20°C to +55°C
- Dimensions: 34mm x 55mm x 3 mm

### GPS Specification

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023MHz chip rate
- Accuracy Position 10 m CEP,
  - without SA/Velocity 0.1m/s,
  - without SA/Time 1 s synchronized to GPS time
- DGPS accuracy 1 to 5m, typical, 0.05m/s, typical
- Date WGS-84
- Acquisition rate(TTFF defined at 95% of first position local station)
  - Hot start < 1s, average, open sky
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- Protocols
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  - SiRF binary
  - RTCM SC-104
- Memory: On-chip 4Mbit FLASH and 1Mbit SRAM



## EV Evaluation Packages

- SIM Card Holder
- Serial Port 1
- Auxiliary Serial Port 2
- SPI Port
- Keypad Port
- Headset and Headset Interface
- Battery Charger
- ON/OFF Module Switch
- Download Switch
- Reset Switch
- Buzzer
- Antenna
- USB to Serial Cable
- Mains Power Supply



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## ORDER CODES

### Quad-Band Wireless Modules

XM-SIM340	Quad-Band GSM/GPRS Module - Sim340
XM-SIM340D	Quad-Band GSM/GPRS SMT Module - Sim340D
XM-SIM548	Quad-Band GSM/GPRS+GPS Module – Sim548
XM-SIM600	Quad-Band Edge GSM/GPRS Module – Sim600

### Tri-Band Wireless Modules

XM-SIM300	Tri-Band GSM/GPRS Module - Sim300
XM-SIM300C	Tri-Band GSM/GPRS DIP Module - Sim300C
XM-SIM300D	Tri-Band GSM/GPRS SMT Module - Sim300D
XM-SIM508	Tri-Band GSM/GPRS+GPS Module – Sim508

### Evaluation Packages

EV1-300/340	Evaluation Package for Sim300 and Sim340 Modules
EV2-508/548	Evaluation Package for Sim508 and Sim548 Modules
EV3-300C/340C	Evaluation Package for Sim300C and Sim340C Modules
EV4-300D/340D	Evaluation Package for Sim300D and Sim340D Modules
EV5-600	Evaluation Package for Sim600 Modules

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