

BGS1



GPRS
Class 12



Advanced
Temperature
Management



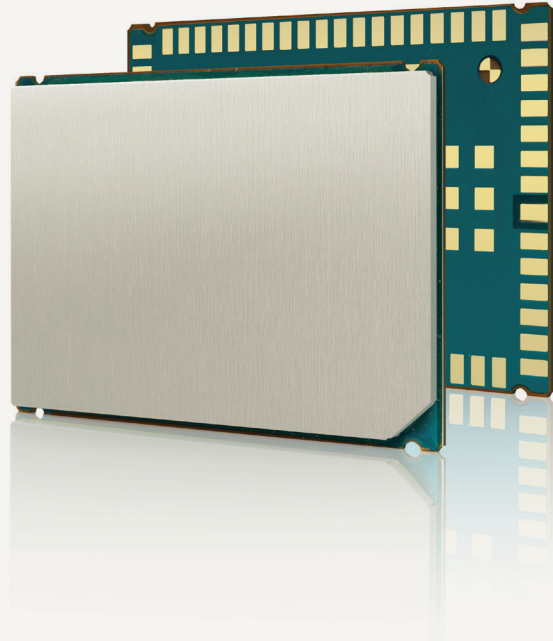
Full Voice
Support



Dual-Band



TCP/IP



GSM/GPRS

Cinterion® BGS1 Wireless Module

Basic GSM/GPRS connectivity with M2M ruggedness

Cinterion® BGS1 Wireless Module

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The Cinterion® BGS1 is a cost optimized 2G GSM/GPRS module including the essentials for the local China, Russia and India markets*, with a footprint and AT command compatibility to the rest of Gemalto M2M's globally certified 2G and 3G Industrial Modules.

The ultra-compact design offers a minimal footprint perfectly suited to the needs of compact M2M products with a focus on basic functionality and high reliability.

BGS1 provides 2.5G GSM software functionality designed to meet M2M requirements with industrial ruggedness. The feature set makes it perfect for devices which need a low amount of bandwidth to transfer critical information for monitoring status, tracking position, or verification of information. This makes BGS1 an optimal product for such applications as POS or remote maintenance and control.

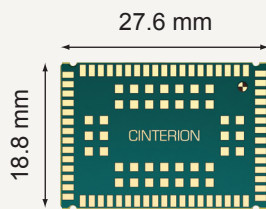
BGS1's hardware is designed for demanding environments, supporting M2M-grade extended temperature ranges from

-40 to +90 degrees Celsius. Extreme environmental ruggedness makes BGS1 a perfect fit for applications where tough conditions may occur, for example track and trace or metering.

BGS1 is built to be compatible with the Cinterion® Industrial module portfolio. It is designed for hardware (Pin-to-Pin) and software (AT command) drop in compatibility. This allows hardware designers to start with this product and then upgrade to different globally certified 2G and 3G modules with or without embedded processing (for example BGS5 or EHS6). Alternatively, for those customers using an existing Industrial Platform product, there is now the option to design in a 2G device optimized for safe, secure, low bandwidth data transmission. For those customer BGS1 offers the perfect entry point to cost aggressive markets like China, Russia and India*.

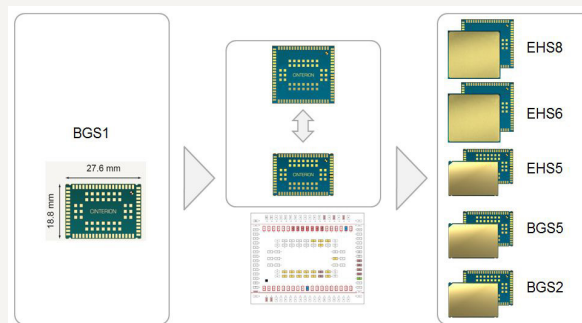
*For the complete country list please see the product documentation.

Basic 2G connectivity with M2M ruggedness



Multi Design Capability 5:1

Five modules – one design: the unique LGA footprint supports flexible application design and offers seamless migration from 2G to 3G within a single design footprint. This compact design prevents warpage. The single PCB design can support all 5 family members of the Industrial product line to ensure future-proof and longevity of M2M applications: BGS2 - BGS5- EHS5 - EHS6 - EHS8



Gemalto M2M Support includes:

- > Personal design-in consulting for hardware and software
- > Extensive RF test capabilities
- > Regular training workshops



Local engineers, a competent helpdesk, a dedicated team of R&D specialists and an advanced development center are the hallmarks of our leading support offer.

Cinterion® BGS1 Features

GENERAL FEATURES

- > GSM Dual-Band: 900 / 1800 MHz
- > 3GPP release 99
- > GPRS multi-slot Class 12
- > Compliant to GSM phase 2/2+
- > Output power:
 - > Class 4 (2W) for 900
 - > Class 1 (1W) for 1800
- > Control via AT commands (Hayes, 3GPP TS 27.007 and 27.005)
- > Internet Services TCP server/client, UDP, HTTP, FTP
- > Supply voltage range 3.3 to 4.5 V
- > LGA66 soldering mount, MSL4
- > Dimensions: 27.6 × 18.8 × 2.7 mm
- > Weight: 2.29 g
- > Operating temperature: -40 °C to +90 °C
- > RoHS compliant

SPECIFICATIONS

- > GPRS Class 12
 - DL: max. 85.6 kbps,
 - UL: max. 42.8 kbps
 - Mobile Station Class B
- > USSD support
- > SMS text and PDU mode, cell broadcast
- > Fax Group 3, Class 1 and Class 2
- > High quality voice support for handset, headset and hands free (double talk) operation
- > FR, HR, EFR and AMR speech codec support

SPECIAL FEATURES

- > Firmware update via serial interface
- > Real time clock

INTERFACES (LGA PADS)

- > Power supply
- > Audio analog
- > Serial interface 1.8 V, including automatic baud rate detection
- > ICC/UICC card interface 1.8 V and 3.0 V supporting SIM
- > 10 GPIO pins 1.8 V (special option for PWM or Buzzer and status indication functionality, 2 GPIO usable for I²C)
- > ADC interface

DRIVERS

- > MUX driver for Microsoft Windows®

APPROVALS

- > CCC
- > SRRC

For more information, please visit

m2m.gemalto.com, developer.gemalto.com, www.facebook.com/gemalto, or follow @gemaltom2m on twitter.

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Gemalto M2M GmbH
St.-Martin-Str. 60
81541 Munich
Germany

➔ M2M.GEMALTO.COM

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security to be free