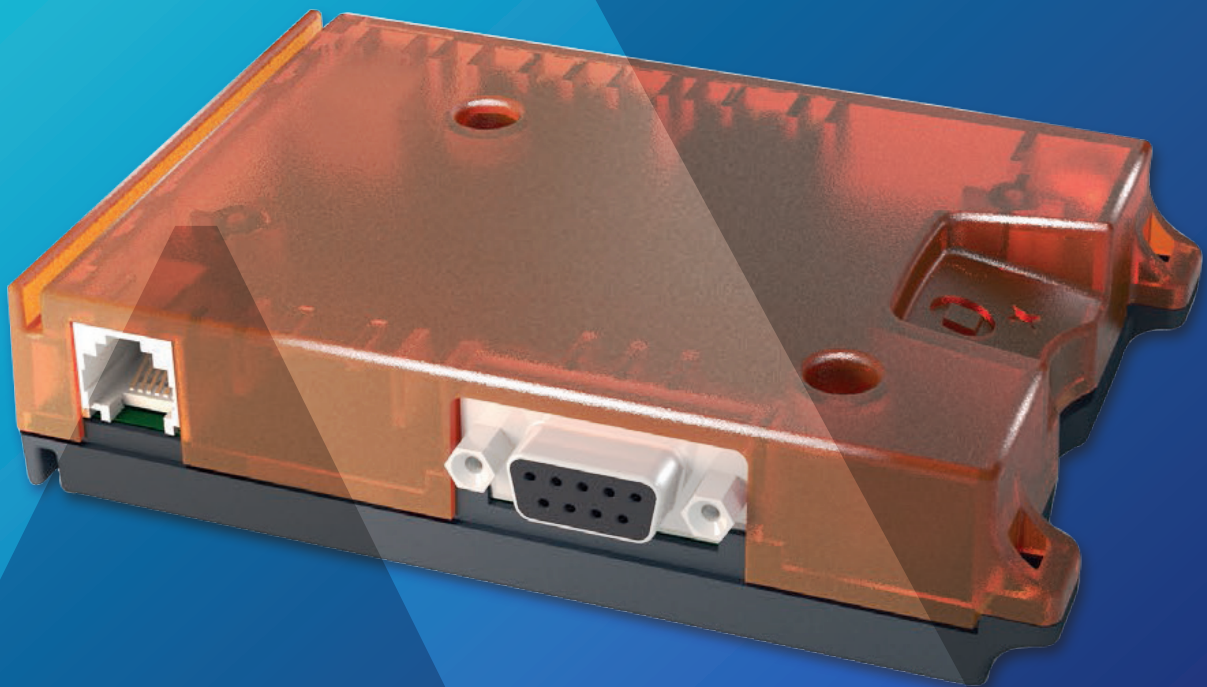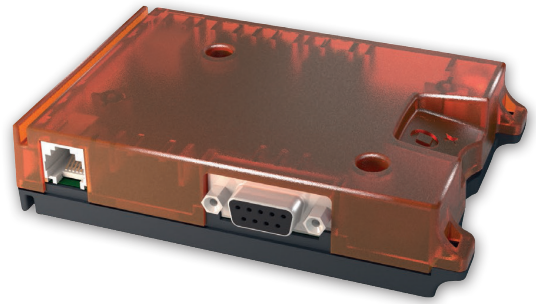TERMINALS
Cinterion® BGS5 Terminal
2G Smart M2M Gateway powered by Java™

Java
POWERED

Cinterion®
BGS5 Terminal

2G Smart M2M Gateway
powered by Java™

BGS5 Terminal

- **Quad Band 2G GPRS Class 12**
- **Flexible Mounting**
- **USB 2.0 High Speed Compatible**
- **Embedded TCP/IP Stack**

- **Java embedded**
- **FOTA Configurable & Royalty-Free**
- **Advanced Temperature Management**
- **RLS Monitoring (Jamming Detection)**

Thales's new Cinterion 2G Smart Terminal takes M2M simplicity to a whole new level. Leveraging Thales's next-generation Java embedded technology, the plug-and-play BGS5T solution powered by a quad-band GPRS baseband enables cost optimized, secure wireless TCP/IP connectivity anywhere in the world for a variety of industrial applications such as metering, remote monitoring, transportation, security and many more.

The Cinterion gateway provides universal industrial interfaces e.g. USB or RS232 and is encased in a compact, rugged housing with an integrated SIM cardholder and unprecedented mounting options. It provides first-time M2M developers and small-scale implementers with a flexible, cost effective solution to quickly launch enterprise optimization solutions that expand the Internet of Things.

Optional features include an embedded component SIM - the Cinterion Machine Identification Module (MIM) and the cloud based SensorLogic application enablement platform that enables out-of-the-box M2M communication reducing integration complexity and Total Cost of Ownership. Like all Cinterion products, the smart 2G terminal comes with full type approval (FTA) and is certified by the largest carriers worldwide.

Plug-and-Play with Most Flexible Mounting

Plug & Play

BGS5 Terminal is a simple and reliable plug-and-play communication device that allows new M2M implementers to quickly connect their industrial applications using wireless technology. With very little integration and approval efforts, it provides a cost effective, swift solution for enterprise optimization technology.

Embedded Java™

Java offers easy and fast application development, a broad choice of tools, high code reusability, easy maintenance, a proven security concept, on-device debugging as well as multi-threading programming and program execution.

Highly Flexible Mounting Concept

Encased in robust plastic housing, the miniaturized terminal works in virtually any application providing secure 24-7 connectivity. For quick and easy implementation, the terminal is compatible with a variety of mounting schemes including:

- DIN rail mounting
- C-rail mounting
- Screw fixing
- The use of cable ties

Thales M2M Support includes:

- Personal design-in consulting for hardware and software
- Extensive RF test capabilities
- GCF/PTCRB conform pretests to validate approval readiness
- 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® BGS5 Terminal Features

General Features

- Quad-Band GSM
  Bands: 850, 900, 1800 and 1900 MHz
  3GPP Release 6
- GPRS multi-slot Class 12
- Compliant to GSM phase 2/2+
- Output power
  Class 4 (2W) for GSM 850 and GSM 900
  Class 1 (1W) for GSM 1800 and GSM 1900
- SIM Application Toolkit, class 3
- Control via standardized and extended
- ATcommands (Hayes, TS 27.007 and 27.005)
- TCP/IP stack access via AT command and transparent TCP services
- Secure Connection for client IP services
- Internet Services TCP/UDP server/client, DNS, Ping, FTP client, HTTP client
- Supply voltage range 8 – 30 V
- Dimension: 115 x 86 x 26 mm (incl. connectors)
- Weight: approx 130g
- Operating Temperature: -30 °C to +65 °C

Specifications

- GPRS Class 12 data rates
  DL: max. 85.6 kbps, UL: max. 85.6 kbps, Mobile Station Class B
- CSD data transmission up to 9.6 kbps, V.110, non-transparent
- USSD support
- SMS text and PDU mode support

Special Features

- USB interface supports multiple composite modes and a Linux-/Mac- compliant mode
- Firmware update via USB and serial interface
- Real time clock with alarm functionality
- Multiplexer according 3GPP TS 27.010
- RLS Monitoring (Jamming detection)
- Informal Network Scan
- Programmable hardware watchdog
- Flexible mounting concept
- Integrated FOTA, configurable and royalty free
- Embedded SIM as an option (MIM)

Java Open Platform

- Java™ ME 3.2
- Secure data transmission with HTTPS/SSL
- Multi-Threading programming and
- Multi-Application execution
- 5 MB RAM and 10 MB Flash File System

Interfaces

- Antenna Connector SMA (female) for GSM/WCDMA
- 20 pin header (Weidmüller) with GPIO's, power, I²C
- Mini SIM card reader, 1,8V and 3,0V
- Embedded SIM as an option (MIM)
- 2 operating status LED's
- 4-wire high speed serial interfaces ASC1
- USB (B) 2.0 HS interface
- Plug-in power supply connector (6-pole Western jack)
- V.24/ V.28 RS-232 interface, up to 920kbps, auto-bauding (D-sub 9-pole female socket)

Drivers

- USB, MUX driver for Microsoft® Windows XP™, Vista™ and 7™
- RIL, USB driver for Microsoft® Windows Embedded Handheld™ >= 6.x
- MUX driver for Microsoft® Windows XP™, Vista™ and 7™

Approvals

- R&TTE, GCF, CE, FCC*, PTCRB*, IC*, UL
- Other local approvals and provider Certifications*
- WEEE, EuP, RoHS and REACH compliant

Thales in IoT:
Driving digital transformation with the power of the IoT

Thales delivers innovative IoT technology that simplifies and speeds enterprise digital transformation. For more than 20 years, our customers – in a wide range of industries - trust our IoT solutions to seamlessly connect and secure their IoT devices, maximise field insights, and accelerate their global business success.

Thales solutions:

- **Connect** assets to wireless networks and cloud platforms
- **Manage** the long lifecycle of IoT solutions
- **Secure** devices and their data
- **Analyse** real-time data transforming it into business intelligence that improves decision making

Our 360° approach provides the essential building blocks needed to simplify design, streamline development and accelerate time-to-market.

For more information, please visit **www.thalesgroup.com/IoT** or follow **@ThalesIoT on Twitter**

thalesgroup.com/iot