

# BabelGate G5002

## Features

BabelGate G5002 represents an advance in the IoT Gateways. This device brings the control capabilities offered by a PLC (Programmable Logic Controller), the flexibility of a PC and the performance required by new M2M modems, all in a compact DIN rail form-factor with a low size and industrial range.

### Power and Flexibility

BabelGate G5002 is based on an Intel Atom\* E3815 processor. This X86 architecture microprocessor facilitates portability between your computer and the IoT Gateway. Now it is possible to quickly develop any application based on the new programming languages and systems (For example: Python\*, JavaScript\*, Node Network\*, Dockers\*, (Java\* and OSGI\*) and the inherited ones. You can use specific distribution of Linux\*, Windows\* IoT 10 or Android\* Also, Intel Atom\* offers the developer the power and scalability necessary for applications with real time needs to behave perfectly thanks to its 1GB RAM and 8GB Flash.

### Security

With BabelGate G5002 security in IoT is no longer an option. This IoT Gateway includes a cryptoprocessor where keys are stored making possible to encrypt any application, its data, a logical partition and even communications, thus ensuring that an IoT device is not vulnerable due to being isolated.

Even the most demanding applications, such as a Firewall, can take advantage of the hardware offered by the BabelGate G5002. Indeed, this IoT Gateway has a basic configuration with two Gigabit Ethernet interfaces to deploy logical filters and thus separate a DMZ (Demilitarized Zone) from our internal network.



*BabelGate G5002*

### Telemetry and Control

Telemetry and Control is the cornerstone upon which numerous IoT applications are being deployed. For this reason, it is necessary to have a device capable to interact with devices equipped with RS-485 or RS-232 industrial interfaces. These interfaces are our gateway to specialized sensors, such as those measuring environmental conditions, electricity, liquids and gases. Similarly, with BabelGate G5002 it is possible to connect with other devices through an USB connector.

BabelGate G5002 control capability allows the control and acquisition of statuses through its 4 ports (2 input and 2 output), electrically isolated and configurable on user demand. Now it is easy to interact with relays or contactors to control devices or powerful machines. On the other hand, if what we need is to collect the state of a certain circuit, it is possible to configure one of these ports for this purpose.

### New Radio technologies

Several IoT and M2M applications are based on wireless communications. Technologies such as 2G, 3G, LTE, NB-IoT and LET Cat M, Sigfox\*, LoRa\* or Zigbee\* are changing the way of interacting with our devices. BabelGate G5002 offers an internal Xbee\* connector to easily evolve and adapt our application towards a radio or operator technology, allowing developers to choose how to communicate with BabelGate G5002.

## Technical Specifications

### Industrial range

BabelGate G5002 is an IoT Gateway designed to withstand hostile environments where temperature, electrical power, electromagnetic emissions and size are not usually favorable. For this reason, this IoT gateway has been designed in a DIN rail enclosure with a width of 7 cm centimeters and easy accessibility to its connectors. It is ideal to be installed in technical cabinets where other equipment is already installed. Powering BabelGate G5002 to 24 and 48 V in DC. Its thermal operating range goes from -25°C to + 70°C degrees and has achieved the CB Marking.



*BabelGate G5002 installed in an electric panel*

### General features

Intel Atom\* E3815 processor

1GB RAM DDR3L "on-board"

eMMC flash memory 8GB "on board"

1 USB 2.0

2 Gigabit Ethernet 10/100/1000Base-T ports

1 RS-485 port

1 RS-232 port

4 Input opto-isolated and configurable ports

- Voltage 5VDC-24VDC

2 Output opto-isolated and configurable ports

- Voltage: Input voltage reference (5VDC-24VDC)
- Max current 100mA

Isolated reference voltage output 5VDC-24VDC

1 Xbee\* connector

24VDC / 48VDC / 220VAC internal power supply

2 configurable LEDs

Real time clock

Security cryptoprocessor TPM (Trusted Platform Module)

\*Technical specifications could change without previous notice. For latest information please contact with TELNET Redes Inteligentes

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### Contact Information

#### TELNET Redes Inteligentes Headquarters

Industrial Area Centrovía  
18 Buenos Aires St.  
50198 La Muela, Saragossa, Spain  
Phone: (+34) 976 14 18 00  
Fax: (+34) 976 14 18 10  
[telnet@telnet-ri.es](mailto:telnet@telnet-ri.es)

#### Commercial office in Madrid

85 Menéndez Pelayo Avenue, 1º A  
28007 Madrid, Spain  
Phone: (+34) 91 434 39 92  
Fax: (+34) 91 434 40 84

#### Subsidiary in Portugal

NETIBERTEL  
35 Fontes Pereira de Melo Avenue, 14ºD  
1050 -118 Lisbon, Portugal  
[comercial.pt@telnet-ri.es](mailto:comercial.pt@telnet-ri.es)

#### Subsidiary in Mexico

TELNET Azteca  
Darwin 74, 3 floor, Col. Anzures  
Del. Miguel Hidalgo C.P. 11590  
Mexico  
[comercial.mexico@telnet-ri.es](mailto:comercial.mexico@telnet-ri.es)

[www.telnet-ri.es](http://www.telnet-ri.es)

For further info and support visit

<http://babelgate.telnet-ri.es>

