

# BabelGate G5001

## Features

The BabelGate G5001 IoT Gateway is designed for developers and entrepreneurs that require more from a Raspberry PI: More power, more portability and a professional finish. Those IoT and M2M applications that require to be deployed in a technical cabinet and in an industrial environment, and need to move forward from a prototype or a proof of concept, now they can.

### Power and Flexibility

BabelGate G5001 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.

### Security

With BabelGate G5001 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.



*BabelGate G5001*

### Expansion

The huge ecosystem of existing peripherals for Raspberry PI can be taken advantage of by the BabelGate G5001 This IoT Gateway offers to the developer a GPIO connector compatible with the Raspberry PI where devices can be connected.

On the other hand, if you need to connect peripherals through USB, BabelGate G5001 includes 4 USB 2.0 interfaces to ensure its flexibility. In addition it includes a Gigabit Ethernet interface for the connection to LAN networks.

### 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 G5001 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 G5001.

## Technical Specifications

### Industrial range

BabelGate G5001 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. It is powered at 220 V in AC and its thermal operating range goes from -25°C to + 70°C degrees.



*BabelGate G5001 installed in an electric panel*

### General features

Intel Atom\* E3815 processor

1GB RAM DDR3L "on-board"

eMMC flash memory 8GB "on board"

4 USB 2.0

1 40 pin I/O connector

- 18 programmable I/O pins
- 3 UART
- 1 I2C
- 1 PWM (Output)

1 Xbee\* conector

2 Programmable LED

1 Ethernet 10/100/1000 Base - T port

220VAC internal power supply (24VDC and 48VDC versions available)

For further info and support visit <http://babelgate.telnet-ri.es>



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