wireless
made easy

UARTDNG200 datasheet

Bluetooth wireless Plug-In module
Class1 100 meters range

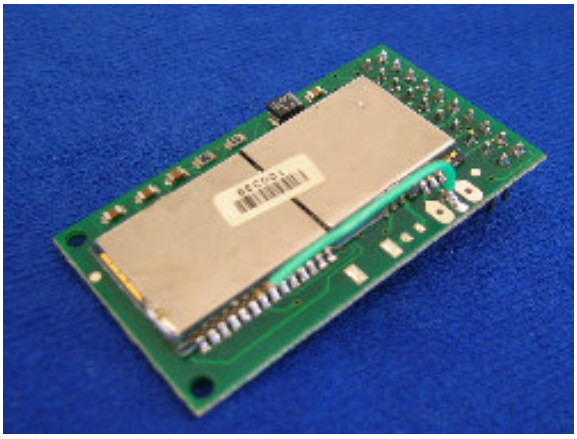
3.3V or **5V** power supply

Data Communication
RS232 (from 1200 to 230400 baud)
Serial 3.3V UART
Serial 5V UART

N° 3 I/O available signals

Standard or custom Firmware

OEM version on request



Description

UARTDNG200 is a professional, slim, wireless module ready for integration in brand new or existing electronic products.

Based on CSR chipset it's fully configurable by serial interface. You can set Bluetooth parameters by the setup utility designed for Windows or throught the command line interface.
Module includes a wire antenna, 3.3V voltage regulator and RS232 transreceiver.

Dimensions:	27 x 50 x 7 mm.
Connector:	20 pins, pitch 2.54mm. male pinstrip
Power supply:	3.3V or 5V (200mA during RF Burst)

Applications

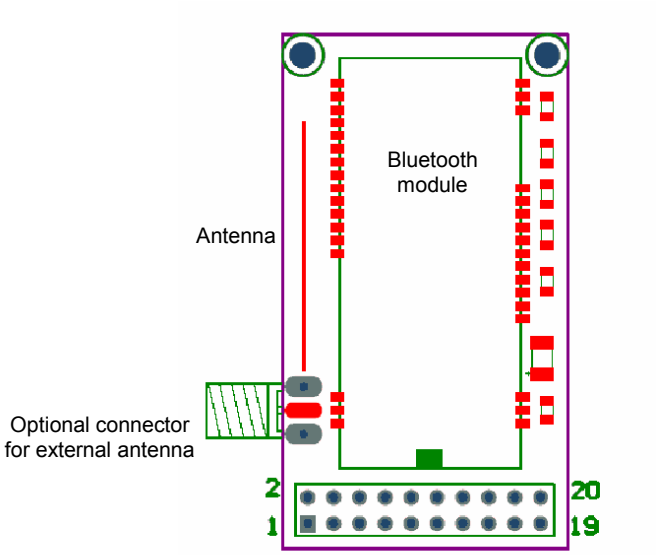
UARTDNG200 allows you to cut the cables using wireless communication with PC, Pda, Mobile phone, etc...

It's suitable for integration in microprocessor systems without operative system since it does not need drivers to work. It can be used as simple cable replacement for serial communications.

- Industrial CNC
- Medical devices
- Fitness Machines
- Professional GPS systems
- Telemetry systems
- Sensors
- Your application

Eikon srl	Address	Telephone and Fax	Internet
	Via Borgognina 5 61030 Lucrezia (PU) Italy	T +39 0721.877365 F +39 0721.897679 M +39 335.442030	email info@eikonsite.it Web www.eikonsite.it

Pin assignment and description



Pin	Name	In Out	Description
1	GND	In	Ground
2	UART_CTS	In	UART CTS +3.3V or +5V TTL
3	+5V	In	+5V (do not use if powered by Pin 5)
4	UART_TX	Out	Output UART TX +3.3V
5	+3.3V	In	+3.3V (or regulated output if there's power supply on Pin 3)
6	UART_RTS	Out	Output UART RTS +3.3V
7	MISO	Out	SPI programming MISO signal
8	UART_RX	In	Input UART RX +3.3V or 5V TTL
9	CSB	In	SPI programming CSB signal
10	UART_RTS_5	Out	Output UART RTS 5V TTL
11	CLK	In	SPI programming CLK signal
12	UART_TX_5	Out	Output UART TX 5V TTL
13	MOSI	In	SPI programming MOSI signal
14	PIO 6	In/Out	Digital I/O #6 (Firmware defined)
15	PIO 5	In/Out	Digital I/O #5 (Firmware defined)
16	PIO 7	In/Out	Digital I/O #7 (Firmware defined)
17	RS232_RTS	Out	Output RS232 RTS
18	RS232_TX	Out	Output RS232 TX
19	RS232_CTS	In	Input RS232 CTS
20	RS232_RX	In	Input RS232 RX

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Address
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61030 Lucrezia (PU)
Italy

Telephone and Fax
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M +39 335.442030

Internet
email info@eikonsite.it
Web www.eikonsite.it

Serial

Baud rate:	from 1200 to 230400 bps
Data bits:	8
Stop bit(s):	1, 2
Parity:	None, Even, Odd
Handshake:	RTS-CTS (if not used, these pins must be connected together)

UART +5V systems:
- connect output signals UART_RTS_5 (if needed) and UART_TX_5
- connect input signals UART_CTS (if needed) and UART_RX (these pins are 5V tolerant)

UART +3.3V systems:
- connect output signals UART_RTS (if needed) and UART_TX
- connect input signals UART_CTS (if needed) and UART_RX

RS232 systems:
- connect RS232_XX signals (take care about the signals directions input-output)

I/O

3 I/O pins are available to turn on/off external devices, to send informations to a microprocessor, to turn on led, buzzer, etc…
These pins are controlled by firmware.

SPI

These 4 signals are used for firmware upgrade and module settings change.

Power

Voltage required:
+3.3V or +5V DC

Current consumptions:
ACL data transfer 115.2kbps UART 200 mA

Temperature range

Operation:	–25°C +75°C
Storage:	–40°C +85°C

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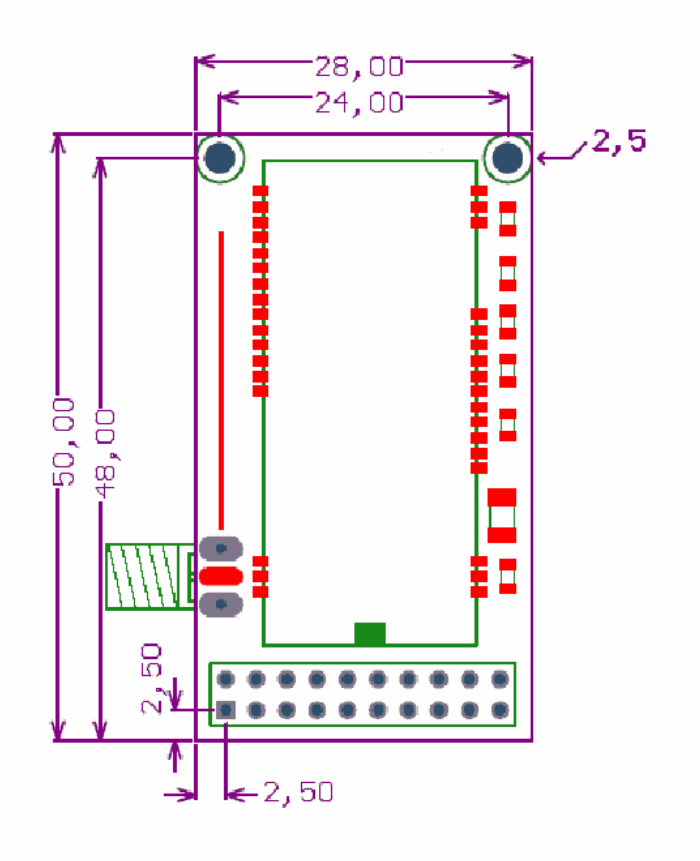
Mechanical drawing (millimeters)



Ordering informations

To order UARTDNG200 please send us a description of your system and we'll suggest you the best firmware solution.

Default EikonATC1 Serial port Firmware (for parameter setup like role,name,pincode...)

Hardware/firmware Options available:

- we can ship UARTDNG200 with Male Pinstrip connector or without any connector (for direct wire soldering)
- optionally an I/O pin can be connected to /Enable pin of RS232 transreceiver (solder joint on jumper); this option was made to disable the RS232 IC when a Bluetooth connection is not active leaving serial bus free (used on TTL systems that use RS232 OR Bluetooth and this may be cause of problems)
- module can be shipped with an external SMA connector for antenna

Custom firmware and hardware versions are available under request.

Firmware on UARTDNG200 can be updated using our DEVBOARD001 (see product list).

Contact us or our local reseller.

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