M2M Series Products

RS-232/RS-422/RS-485 to Bluetooth 4.0 Converters

RoHS CE FC

tBLE-720

Dimensions

Left Side View

Front View
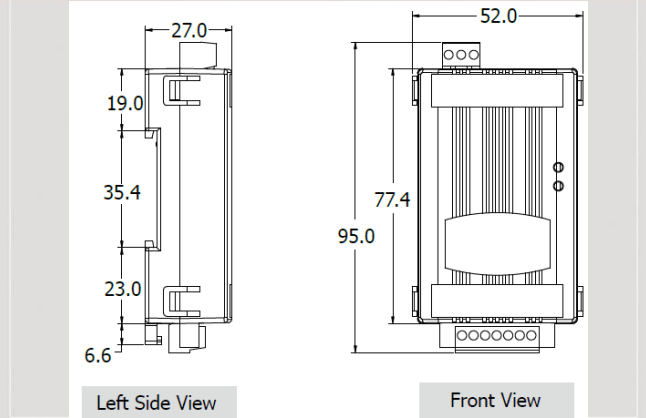
The tBLE-720 module is designed for serial network like RS-232/422/485. It allow RS-232/422/485 interface to be converted to Bluetooth low energy (LE) piconet network. User can choose tBLE-720 or mobile device to do the connection, which provides Bluetooth LE data conversion between two devices. The tBLE-720 has two transmission modes – advertisement and connection mode. The tBLE-720 supports a lot of useful AT commands. They can set many parameters such as connection parameters, broadcast parameters and Bluetooth LE role.

Features

- Frequency: ISM 2.4 GHz
- Standard: Bluetooth 4.0
- Interface: RS-232, RS-422 and RS-485
- Baud Rate up to 115200 bps
- Wireless transmission range up to 20 meters(Line of Sigh)
- Supports OTA firmware upgrade
- Supports multiple connections – Max slave is 3
- Supports two types of communication- advertisements and connection
- Provides AT commands to setup the module
- Provides status / RF link indication LEDs
- Easy-to-use switch for baud rate and Bluetooth LE role setting
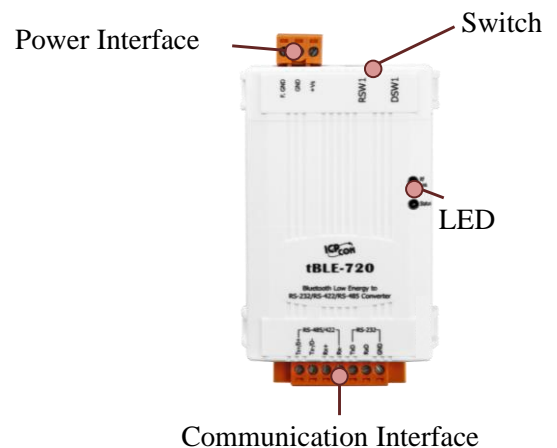- Operating temperatures, -25 ℃ ~ +75 ℃

Utility

ICP DAS provides the BLE-USB configuration utility for Windows OS.

- Parameters configuration
- Firmware upgrade
- Easy test to transmit/receive
- Setting files management

Appearance

Power Interface

Switch

LED
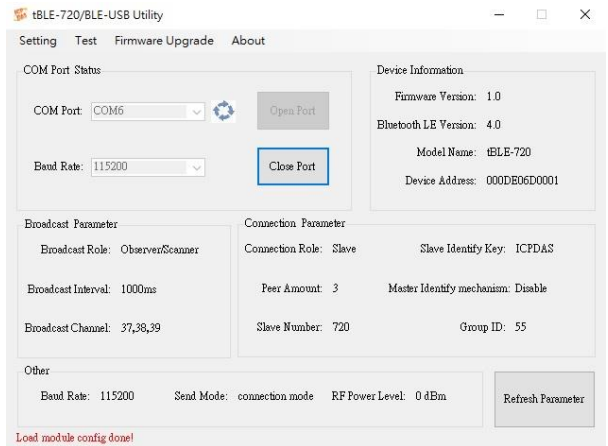
Communication Interface

Hardware Specifications

Hardware	
CPU	32 bit, Microprocessor
LED indication	status / RF link
RF Specification	
Tx power	-20~4 dBm @ 2.4 GHz ISM(2402~2480 MHz)
Transmit Range	20 m (LOS)
Max. Slaves	3
Stack Version	Bluetooth 4.0
Role	Central/Peripheral – connection mode observer /broadcaster – broadcast mode
Communication Interface	

COM0	RS-232	TxD, RxD and GND
	RS-422	Tx+, Tx-, Rx+ and Rx-
	RS-485	Tx+ and Tx-
	Data Format	N,8,1
	Baud Rate	9600~115200 bps

Power	
Operating Voltage	+10 VDC ~ +30 VDC
Power Consumption	1 W
Mechanical	
Casing	Plastic
Dimensions (W x L x H)	52mm x 95mm x 27 mm
Environment	
Operation Temp.	-25℃ ~ +75℃
Storage Temp.	-25℃ ~ +75℃
Humidity	5~95% non-condensing

Applications
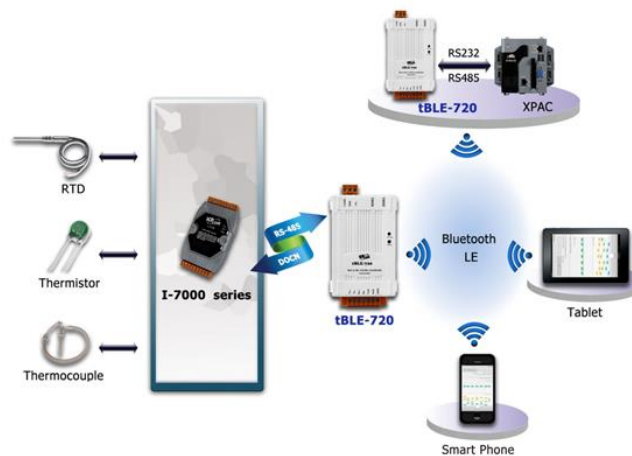
Ordering Informaion

tBLE-720 CR	RS-232/RS-422/RS-485 to Bluetooth Low Energy Converter (RoHS)