

TCP/IP EMBEDDED SERIAL WIFI MODULE FOR M2M AND IOT

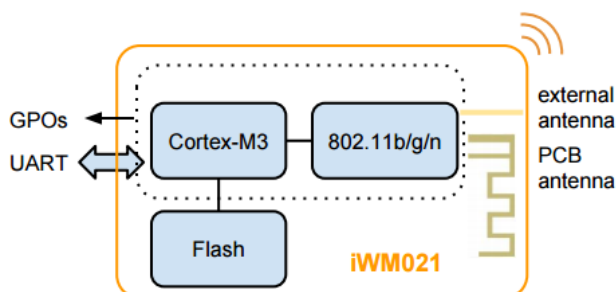
FEATURES

- ARM 32-bit Cortex™-M3 MCU
- Support 802.11b/g/n(single stream)
- 2.4GHz frequency band
- WiFi data rate up to 72.2Mbps
- UART baud rate from 9600 to 921600 bps
- Support RS232, RS485, and RS422
- TCP server or client
- HTTP client
- Support Modbus protocol
- Support MQTT protocol for IOT
- Support NTP for time synchronization
- Two GPOs for on/off control
- On board PCB antenna or external antenna
- Web based UI for configuration
- Industrial operational temperature: -40°C to 85°C
- Small size: 20mmX15mmX2.15mm
- Low power consumption, averagely 80mA@3.3V as data transferring
- Ready-to-use, no coding job
- Broadcom platform

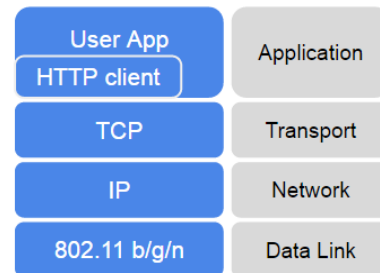
APPLICATIONS

- Lighting Control
- Precision Agriculture
- Smart home
- Building automation
- Toys
- Health and wellness monitoring
- Security
- Robots
- Smart grid
- Instrument
- Industrial automation

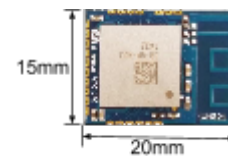
BLOCK DIAGRAM



STRUCTURE

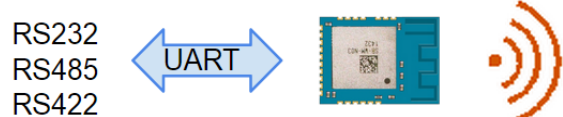


REAL SIZE



SIMPLE TO USE

1. CONNECT to the serial port of your device



2. CONFIGURE through webUI or APP

The screenshot shows the webUI configuration page for the iWMM021 module. The page is titled "SERIAL-WIFI" and has tabs for "Serial", "Wi-Fi", "Network", "Applications", "System", and "Reboot". The "Serial" tab is selected, and the "RS232" configuration is shown. The settings are: Data Baud Rate: 9600, Data Bits: 8, Data Parity: None, Data Stop Bits: 1, and Flow Control: None. There are "Save" and "Cancel" buttons at the bottom.

3. GO! Start your transferring.

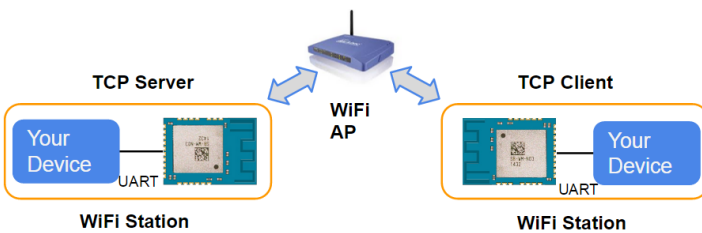
PACKAGE OPTION

1. iWM021 with M2M

- As a TCP server, supports up to 5 client connections
- As a TCP client, connects to a TCP server
- As a HTTP client, connects to user specified HTTP server



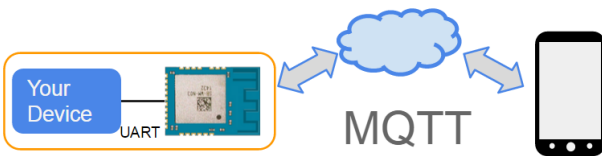
Example: direct link for cable replacement



Example: TCP connection in local network

2. iWM021 with MQTT

- Connect to existed MQTT cloud server
- Provide MQTT server installation option for private cloud



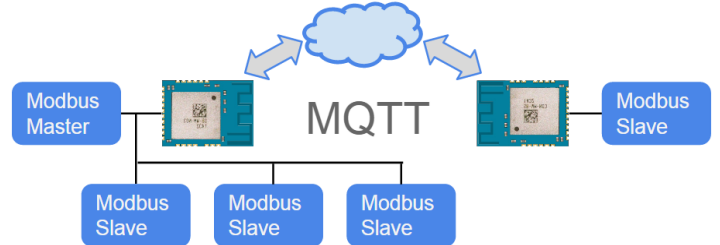
Example: manage your device through the cloud



Example: Remote on/off control

3. iWM021 with Modbus over MQTT

- Connect Modbus RTU/ASCII to the cloud directly. Modbus device can talk to each other through the cloud



Example: Modbus over MQTT to replace Modbus TCP