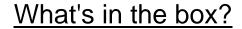
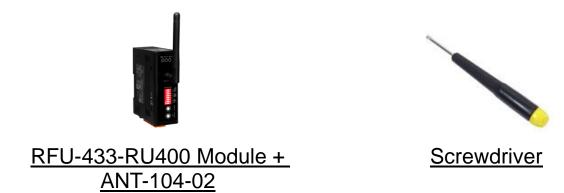
# RFU-433-RU400 Quick Start

V1.00, Sep. 2019



In addition to this guide, the package includes the following items:



#### More detail about RFU-433-RU400

http://www.icpdas.com/root/product/solutions/industrial\_wireless\_communication/wireless\_solutions/rfu-433-ru400.html

#### 1. Pin Assignment

|   | Pin  | Description       |
|---|------|-------------------|
|   | RxD  |                   |
|   | TxD  | RS-232            |
| +Vs GND D+ D- F.G. GND TxD RxD LDC Input LRS-485 RS-232 COM 0 | GND  |                   |
|   | F.G. | Frame Ground      |
|   | D-   | RS-485            |
|   | D+   | K3-465            |
|   | GND  | Power:            |
|   | +Vs  | +10 ~ +30 VDC, 1A |

Technical Support: <a href="mailto:service@icpdas.com">service@icpdas.com</a>

### 2. <u>LED</u>

| LED                        | Behavior    | Description                                  |  |  |  |
|----------------------------|-------------|--|--|--|--|
| PWR                        | On          | +10 ~ +30 VDC Power On                       |  |  |  |
| PVVK                       | Off         | Power Off                                    |  |  |  |
| On RF is transmitting data |             | RF is transmitting data                      |  |  |  |
| RF_Tx Off                  |             | RF is no data to transmit                    |  |  |  |
|                            | Always On   | RF is receiving data, signal strength high   |  |  |  |
| RF_Rx                      | 100ms Flash | RF is receiving data, signal strength middle |  |  |  |
| Kr_Kx                      | 500ms Flash | RF is receiving data, signal strength low    |  |  |  |
|                            | Off         | RF is no data to receive                     |  |  |  |

# 3. Rotary Switch

| Switch Name  | No | Baud rate (bps)  | No    | Baud rate<br>(bps) |  |
|--------------|----|------------------|-------|--------------------|--|
|              | 0* | Same with COM    | 1     | 57600              |  |
|              | 2  | 38400            | 3     | 19200              |  |
|              | 4  | 9600             | 5     | 4800               |  |
|              | 6  | 2400             | 7     | 1200               |  |
| Ŭ,           | 8  | 650              | 9 ~ E | reserved           |  |
| RF Baud Rate | F  | Firmware version |       |                    |  |

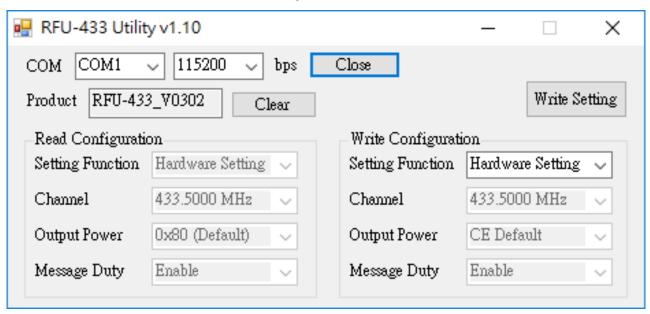
<sup>\*</sup> If COM rate is 115200 bps, the RF rate will set to 57600 bps.

| Switch Name | No    | Baud rate (bps) | No | Baud rate<br>(bps) |
|-------------|-------|-----------------|----|--------------------|
|             | 0     | 115200          | 1  | 57600              |
|             | 2     | 38400           | 3  | 19200              |
|             | 4     | 9600            | 5  | 4800               |
|             | 6     | 2400            | 7  | 1200               |
| L v         | 8 ~ E | reserved        |    |                    |
| COM Rate    |       |                 |    |                    |

#### 4. DIP Switch

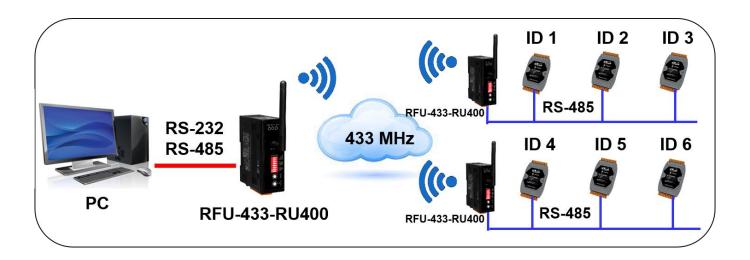
|                   | No                | Switch Name      | Description   |                                   |               |                                  |                       |    |  |
|-------------------|-------------------|------------------|---------------|-----------------------------------|---------------|----------------------------------|-----------------------|----|--|
| 5 7 8 Data Format | 1 ~ 3             | Group ID         |               | l qu                              | ID can c      | 0 with the same communicate with |                       |    |  |
|                   | 4 ~ 6             | reserved         | rese          |                                   |               | erved                            |                       |    |  |
| 2 3 4 Group ID    | 7 ~ 8             | COM<br>data type |               | Data Type N, 8, 1 O, 8, 1 E, 8, 1 |               | 7<br>OFF<br>ON<br>OFF            | 8<br>OFF<br>OFF<br>ON |    |  |
|                   |                   |                  |               |                                   | Re            | epeater                          | ON                    | ON |  |
|                   | Sot mo            | mada/Dun mada    |               | Set Utility se                    |               | etting mode                      |                       |    |  |
| Set Run           | Set mode/Run mode |                  | Run Normal fi |                                   | firmware work |                                  |                       |    |  |

#### 5. RFU-433-RU400 Utility

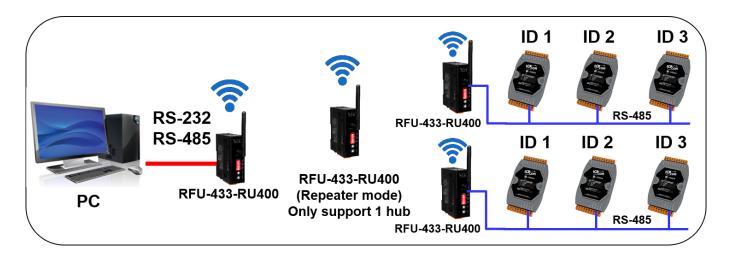


Users can select "Hardware Setting" or "Software Setting" through the utility. If use "Hardware Setting", the "Channel" parameter will be fixed at 433.5 MHz, the "Output Power" parameter will be fixed at 10 dBm, and the "Message Duty" parameter will be fixed at enable 10% message duty. If use "Software Setting", the "Channel", "Output Power" and "Message Duty" parameters can be set by users.

# 6. Application Example



PC can control RS-485 modules 1 ~ 3 through a RFU-433-RU400. And control modules 4 ~ 6 through another RFU-433-RU400.



If these two RFU-433-RU400 are far away.
Users can add a RFU-433-RU400 with repeater mode between these two RFU-433-RU400.