DIWI

IPVDW01

User Manual

IPVDW01 Product Introduction

1.1. Product Appearance

Data received
Data transfer indicator
SMT Antenna
Power indicator

DIP Switch
RS-485 interface
Ground
DC Power interface
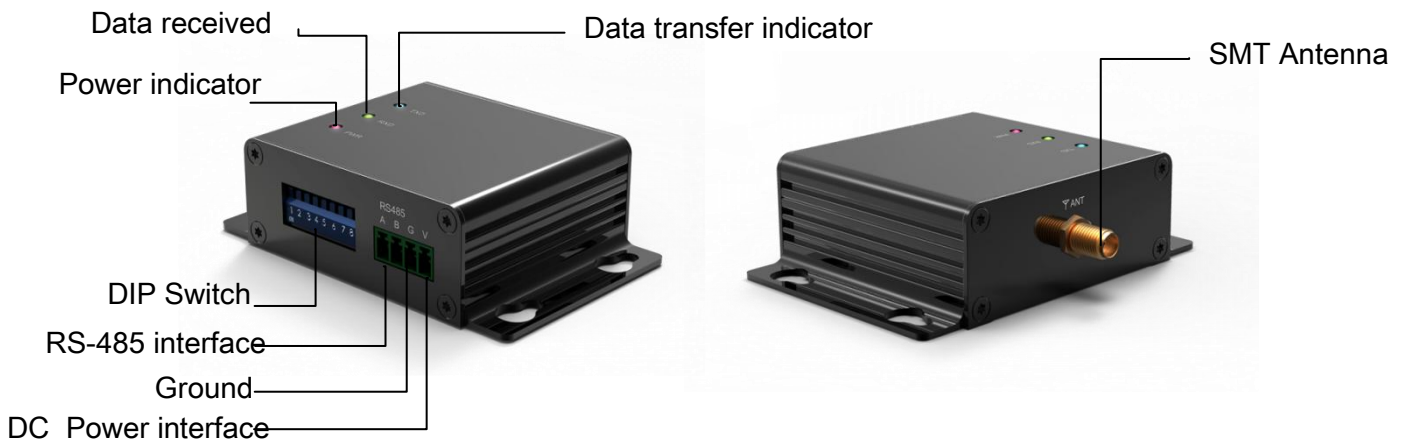
1.2. Hardware Description

IPVDW01 Wireless Transceiver can use iPVita PC Tool to set the function. Please follow the steps as below:

1. PC with RS485 interface: Please use RS485 cable to connect DiWi IPVDW01 and computer directly.

2. PC without RS485 interface: Please use USB to RS485 connector cable to connect computer. Then check PC has relevant USB driver program, you can click My computer -> Control Panel-> Device Manager to check:

   - If has, you will see USB Serial Port (COM6) (Port Number will be different based on different computers)

   - If no USB driver, PC will show Prol
   Please install USB driver program first from the relevant product website.

3. Please plug DC8~28V to DC power interface

4. If you use USB to RS485 connector cable, please refer to below photo.

DC power source
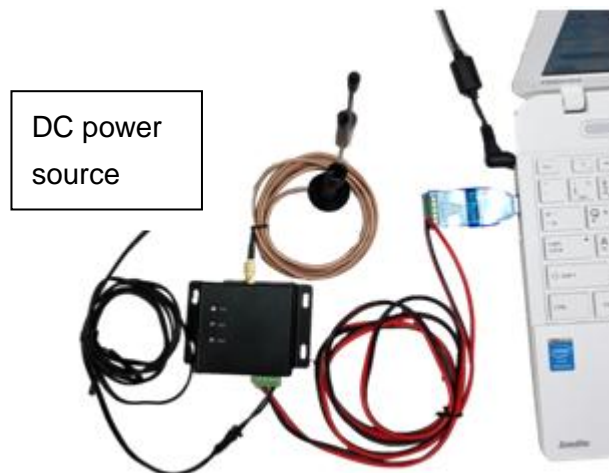
1.3. IPVita PC Tool Description :

1. To open "IPVita PC Tool" software, and choose relevant Port Name, then click "Open Port"(it is the same button as "Close Port"). If you cannot open it, please choose other "Port Name" to try again.

2. Click "Get Param" to show the current parameters of Module Settings. Users can choose the relevant parameters according to their needs.
Click "Set Param" to send new parameters of Module Settings to IPVDW01. After allocated, please click "Close Port", as the below photo:
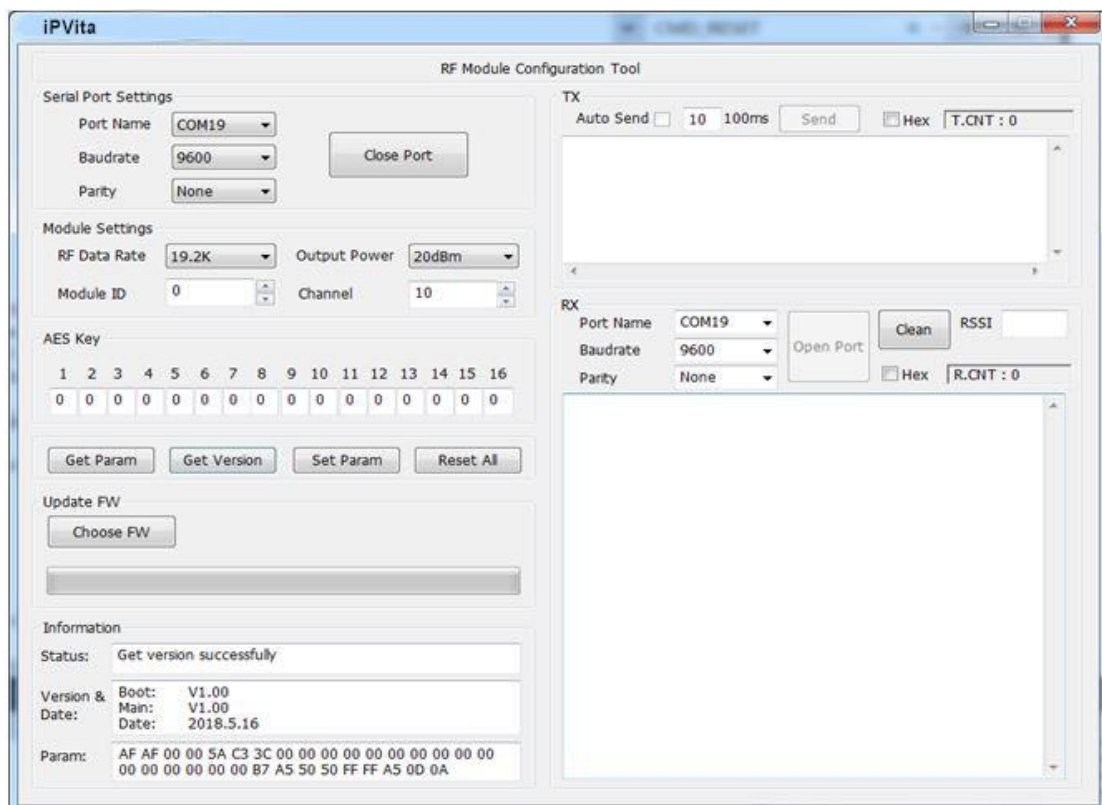
Serial Port Settings:

Port Name : to select a port name

Baudrate : to select transmitting frequency 1200~115200, the default is 9600

Parity : to select None/Odd/Even, the default is "None"

Open Port/Close Port : to Open/Close Port, the same button.

Module Settings

RF Data Rate：to select 0.3K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K

Module ID：to select Module ID 0 ~65535（this function is not ready now）

Channel：to select the channel 1 ~ 32

AES key:

AES Key is set by 1~16 characters，the character is limited as follows, "0" ~ "9", "a" ~ "z", "A"

~ "Z".

Remark: The Module Setting and AES Key have to be the same for the two IPVDW01, then they can transfer data correctly.

Acquisition and Setting:

Get Param: To get the current parameters of Module Settings and AES Key
Get Version: To know the current Firmware version and Date
Set Param: to send the parameters of Module Settings and AES Key to equipment
Reset all parameters of Module Settings

Update FW:

Click "Choose FW" to update Firmware

Information

Status： to show the operation status

Version & Date： to show Firmware version and Date

Param： to show the commands

TX - Data Transmitting Settings

Send：to key-in data you want to send on below edit column

Auto Send：Send data automatically

X 100ms：Time interval by Auto Send, for example, X=5, it meant data will send automatically

by each 500ms. The default is set X=10.Remarks: If you want to transmit lots of data, we suggest setting longer time-interval.

T.CNT： to show the total bits which transmitted

Hex： to select data format is Hexadecimal

RX – Data Receiving Settings

Port Name：select a Port Name

Baudrate： select transmitting frequency 1200~115200, the default is 9600

Parity： select None/Odd/Even, the default is "None"

Open Port/Close Port：to Open or Close Port, they are the same button.

R.CNT：to show the total bits which received

Clean： to clean all data and bits on the below edit box

Hex： to select data format is Hexadecimal

RSSI：to show Received Signal Strength Indicator

FCC Notice:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

---Reorient or relocate the receiving antenna.

---Increase the separation between the equipment and receiver.

---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

---Consult the dealer or an experienced radio/TV technician for help.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.