



WF-2571

Quick Start

Mar. 2013 Version 1.0

「 WF-2571 」 Package Checklist

The package includes the following items:

- One WF-2571 module
- One Quick Start
- One software utility CD
- One screw driver
- One USB cable (CA-USB18)
- One Antenna 2.4GHz - 5 dBi (ANT-124-05)



Note:

If any of these items are missed or damaged, contact the local distributors for more information. Save the shipping materials and cartons in case you want to ship in the future.

● Appearance and pin assignments

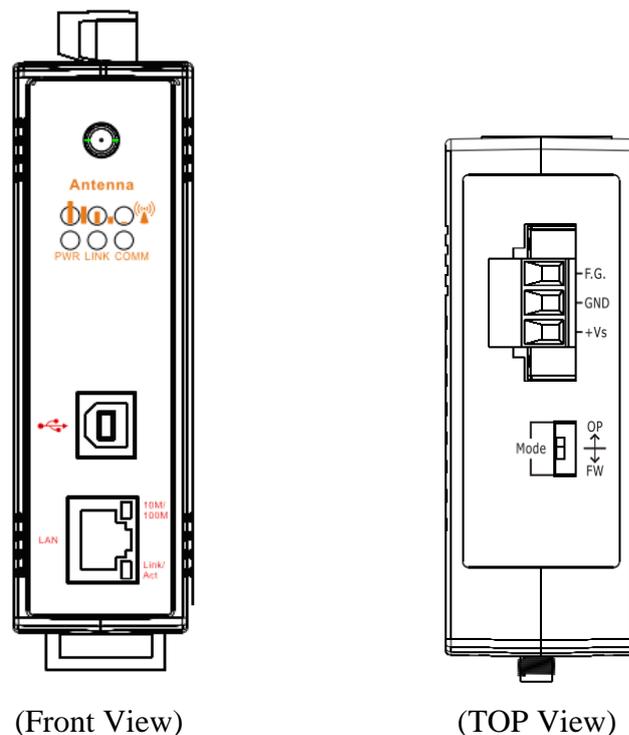


Figure 1: Appearance of the WF-2571

Table 1: System Status Indicator

System Status LED Indicator		
LED	LED Status	Description
PWR	Blink per 100 ms	Wi-Fi modem communication error
	Blink per 500 ms	Wi-Fi modem reply error
	Blink per 1000 ms	Initialize the wireless network
	Off	Power failure
LINK	Always turned on	WLAN connection established
	Blink or Off	During WLAN connection establishment
COMM	Blink	Data transmission
	Off	Bus Idle

Table 2: Signal Strength LED Indicator

Signal Strength LED Indicator	
LED Status	Signal strength
	High
	Medium
	Low
	Bad or No Signal

Operating Mode Selector Switch

FW mode: Firmware update mode

Move the switch to the OP position after the upgrade is complete.

OP mode: Firmware operation mode

In the WF-2571, the switch is always in the OP position. Only when updating the WF-2571 firmware, the switch can be moved from the OP position to the FW position.

Table 3: Power/Signal Connector

Power Connector	
Pin Assignment	Description
F.G	Frame Ground
GND	Power GND
+Vs	+10 ~ +30 VDC

● Installation and Application

Users can use two WF-2571s or one WF-2571 module with the computer that supports wireless network connection structure in the application. It can complete the purpose of wireless network connection by this way.

■ Hardware Installation

The associated hardware configuration is shown as following steps.

Step 1: Checking operation mode of the WF-2571

It needs to set the DIP switch to the "OP" position (operating mode). As resetting the power, it will cause the device to operate in the operation mode.

Step 2: Power connection

Connect the power supply to power terminator of WF-2571.

Step 3: USB port connection

WF-2571 supports USB communication for wireless configuration. If it does not need to modify the parameter settings, this step can be omitted.

■ Connection Applications

◆ Ad-Hoc application architecture

A. Basic equipment: WF-2571x2, PCx2



Figure 2: Ad-Hoc connection test architecture

B. WF-2571 configuration is as below steps.

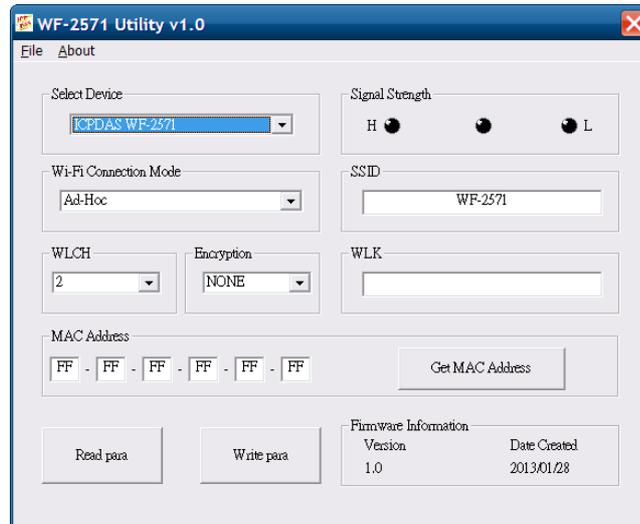


Figure 3: Ad-Hoc connection configuration

- 01 、 Select Device: Select the "ICP DAS WF-2571" device.
- 02 、 Wi-Fi Connection Mode : Set to "Ad-Hoc" mode.
- 03 、 SSID : Set to "WF-2571".
- 04 、 WLCH : Set to "2".
- 05 、 Encryption : Set to "NONE" (without encryption).
- 06 、 WLK : It does not have the setting.
- 07 、 MAC Address : All set to "FF".

C. Upload parameters

After completing the configuration above, press the "Write para" button to upload the parameters, the progress bar will show the transmission status. As uploading is successful, the upload successful screen will appear as shown below.



Figure 4: Parameter transmission status and upload successful screens

Another one WF-2571 also uses the same configuration as described above.

D. Connect network cable

Connect Ethernet cable between WF-2571 and PC

E. Reboot devices

Please reboot both the two WF-2571s after the above settings. After some time, two devices will automatically establish a connection.

F. Network configuration settings of PCs

01 、TCP/IP Setting :

- a. Select the Internet Protocol (TCP/IP) and press the "Properties" button.
- b. Click the "Use the following IP address" and enter the **IP address** as "192.168.255.10", **Subnet mask** as "255.255.255.0". Finally, press "OK" button.
- c. Another computer's network settings as follows.
IP address as "192.168.255.11"
Subnet mask as "255.255.255.0"

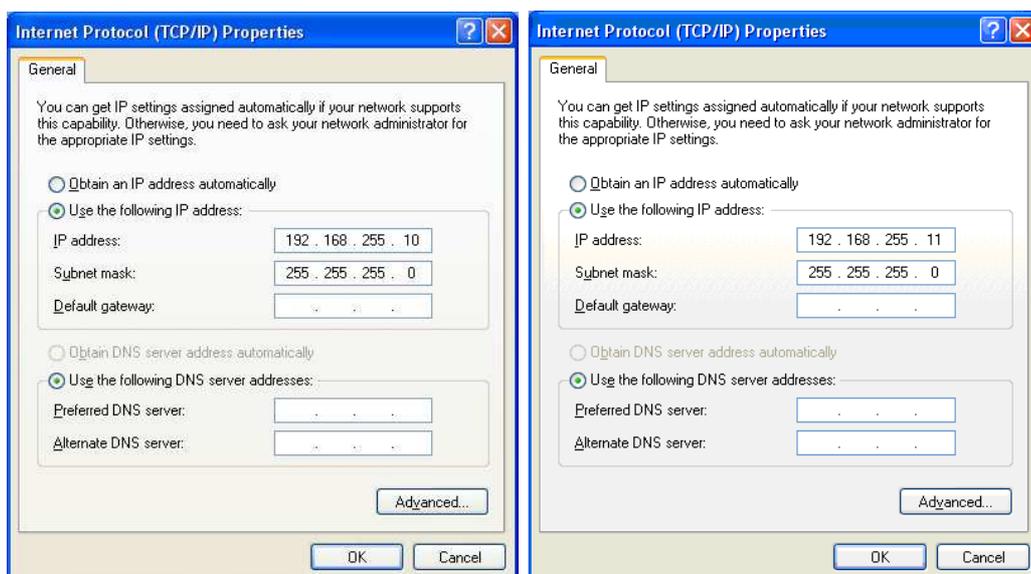


Figure 5: Properties setting of Internet Protocol (TCP/IP)

F. Internet connection test (Use ping command)

XP – Click on "Start" then "Run" and kind CMD into the "Open" written text box then media "OK" to start a Control Immediate screen.

Windows 7/Windows 8 – Click on "Start" and kind CMD into the "Search" written text box then right select the "CMD" program quick way at the top of the listings and choose to "Run As Administrator" (say yes to any verification message) to start a Control Immediate screen.

In the Control Immediate screen, kind called ping 192.168.0.10 or 192.168.0.11. If the internet access is working fine that it should show a similar reaction as following figures.

```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\icpdas>ping 192.168.0.10

Pinging 192.168.0.10 with 32 bytes of data:

Reply from 192.168.0.10: bytes=32 time=6ms TTL=128

Ping statistics for 192.168.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms,    Maximum = 6ms,    Average = 6ms

C:\Documents and Settings\icpdas>_

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\icpdas>ping 192.168.0.11

Pinging 192.168.0.11 with 32 bytes of data:

Reply from 192.168.0.11: bytes=32 time=6ms TTL=128

Ping statistics for 192.168.0.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms,    Maximum = 6ms,    Average = 6ms

C:\Documents and Settings\icpdas>_

```

Figure 6: Communication test screen

◆ AP application architecture

A. Basic equipment: WF-2571x1, wireless APx1, PCx3



Figure 7: AP connection test architecture

B. WF-2571 connection configuration is as below steps.

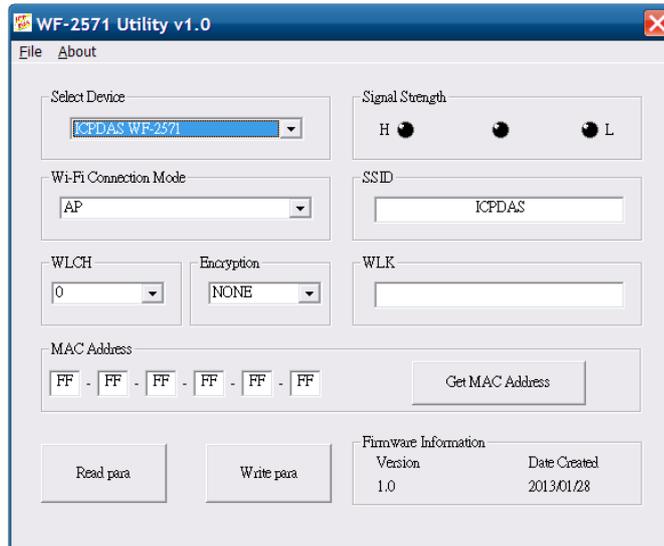


Figure 8: AP connection configuration

- 01 、 Select Device: Select the "ICP DAS WF-2571" device.
- 02 、 Wi-Fi Connection Mode : Set to "AP" mode.
- 03 、 SSID : Set to "ICPDAS" (The same SSID of the wireless AP).
- 04 、 WLCN : Set to "0" (for auto select channel).
- 05 、 Encryption : Set to "NONE" (without encryption).
- 06 、 WLC : It does not have the setting.
- 07 、 MAC Address : All set to "FF".

C. Upload parameters

After completing the configuration above, press the "Write para" button to upload the parameters.

D. Connect Ethernet cable between PC and WF-2571

E. Reboot devices

Please reboot the WF-2571 after the above settings. After some time, WF-2571 and Wireless AP will automatically establish a connection.

F. Configuration network settings of PCs

01 、TCP/IP Setting :

- a. Click the "Use the following IP address" and entry the **IP address** as "192.168.255.10" ~ "192.168.255.12", **Subnet mask** as "255.255.255.0". Finally, press "OK" button.

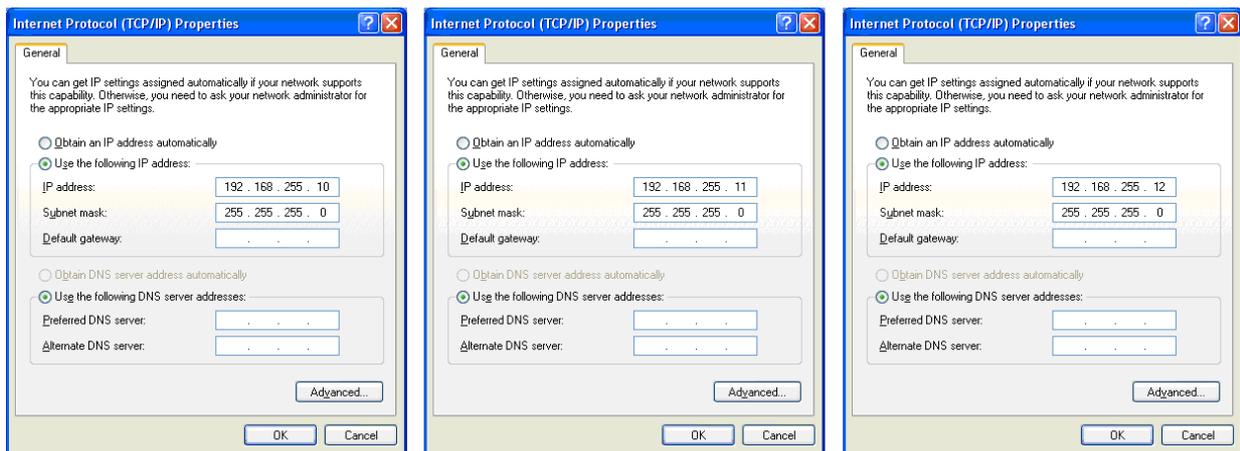


Figure 9: IP address setting interface of PC1, PC2, PC3

G. Internet connection test (Use ping command)

In the Control Immediate screen, kind called ping 192.168.0.10, 192.168.0.11 or 192.168.0.12. If the internet access is working fine that it should show a similar reaction as Figure 6.

● Technical Support

If you have problems about using the WF-2571 module, please contact ICP DAS Product Support.

Email: service@icpdas.com