

WC45i-GW-P Ethernet Gateway Quick Start Guide

Thank you for purchasing the WC45i-GW-P.

This **Quick Start Guide** provides brief procedures for the hardware installation and configuration of the WC45i-GW-P.

Note: For more detailed installation, connection, and configuration procedures, download the WC45i-GW-P User Manual from the <u>http://support.freewave.com/</u> website. Registration is required to use this website.

The basic steps are:

- A. Power and Gateway Connections (on page 1)
- B. WC Toolkit Installation (on page 1)
- C. WC Toolkit Update (on page 3)
- D. Setup the Computer IP Address Configuration (on page 3)
- E. Change the WC45i-GW-P Password (on page 4)

Included Equipment

Inclu	Included Equipment - WC45i-GW-P			
Qty	Description			
1	WC45i-GW - Gateway with Modbus Interface			
1	WC45i-GW-P - Ethernet Interface Module with Modbus TCP connection			
1	WC45i-GW-P Ethernet Gateway Quick Start Guide			

User-supplied Equipment

- Small, flathead screwdriver
- Mounting equipment for the WC45i-GW-P.
- CAT5e / CAT6 Ethernet cable
- DC Adapter Power Supply (+6 to +30VDC)
- Barrel connector with Ground and Power flying leads
- Optional: WC45i-GW or WC45i-GW-DIN
- Computer for WAVECONTACT device configuration.

Power and Gateway Connections

Important!: Verify the items listed in Included and User-supplied Equipment section are available before starting this procedure.

- 1. All wiring should be neat and orderly.
- 2. On the WC45i-GW-P terminal blocks:
 - a. Connect the configuration wires of the Gateway to their respective colordesignated screw terminal connections.
 - b. Use the screw terminal connection to connect the Power Source from an external power supply of +6 to +30VDC.
 - c. Use the GND screw terminal connection to connect the External power ground.
- Connect the CAT5e / CAT6 Ethernet cable to the WC45i-GW-P RJ-45 port and the Ethernet connection on the computer.
 The WC45i CW P connections are similar to and Figure 1:

The WC45i-GW-P connections are similar to and Figure 1:



Figure 1: WC45i-GW-P Ethernet Gateway Connected to a WC45i-GW - close-up

4. If this is the first time the WC45i-GW-P is installed, wait for the drivers to install.

Important!: Depending on the computer and connection, the driver installation can take 3-6 minutes.

5. Continue with WC Toolkit Installation (on page 1).

WC Toolkit Installation

Note: The images in this procedure are for Windows® 7 and/or Firefox®. The dialog boxes and windows appear differently on each computer.

1. Open the FreeWave Support site at http://support.freewave.com/.

Important!: Registration is required to use this website.

2. Enter the User Name and Password.



A successful Login message briefly appears. The **Help Topics** window opens.

4. Click the Software link.

Help Topics		With
Software	Path Study Request Form	
ZumlQ App Server Software	MM2-M13 Series	
Training and Education	O ZumLink Series	Can't Find It? Contact us1 Phone: 1.866.923.6168 Email: <u>support/@freewave.com</u>

Figure 2: Help Topics window

The Software window opens.

5.

- Click the WAVECONTACT Toolkit link.
- The available software appears in the window.
- 6. Select and click the attachment.



Figure 3: WAVECONTACT Toolkit window

The Opening dialog box opens.

Note: This procedure shows Firefox® dialog boxes. Other browsers will have different dialog boxes and procedures.

- 7. Click OK.
- The Enter name of file to save to dialog box opens.
- 8. Search for and select a location to save the **.zip** file to and click **Save**. The **Enter name of file to save to** dialog box closes.
- 9. Open a Windows® Explorer window and find the location where the .zip file was saved.
- 10. Double-click the .zip file.
- 11. Extract the .exe file from the .zip file into a parent location.
- 12. Double-click the **.exe** file to run the WC Toolkit installer. The **Open File - Security Warning** dialog box opens.



Figure 4: Open File - Security Warning dialog box

13. Click Run.

The User Account Control dialog box opens.



Figure 5: User Account Control dialog box

- 14. Click Yes.
 - The WC Toolkit Setup Wizard starts.

🕞 Setup - FreeWave WC Toolkit	- • 🗙
Select Destination Location Where should FreeWave WC Toolkit be installed?	
Setup will install FreeWave WC Toolkit into the following folder.	
To continue, click Next. If you would like to select a different folder, click	Browse.
C:\Program Fies (x86)\FreeWave\FreeWave WC Tookit	Browse
At least 19.2 MB of free disk space is required.	
Next >	Cancel

Figure 6: WC Toolkit Setup Wizard - Select Destination Location window

- 15. Click Next to continue.
 - The Ready to Install window opens.

📴 Setup - FreeWave WC Toolkit	• 💌
Ready to Install Setup is now ready to begin installing FreeWave WC Tookit on your computer.	Ð
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files (x86)\FreeWave\FreeWave WC Tookt	*
()	Ŧ
< Back Instal	Cancel



16. Click Install.

The install process is very quick. The **Installation Complete** window opens.

Completing the FreeWave WC Toolkit Setup Wizard
Setup has finished installing FreeWave WC Toolkit on your computer. The application may be launched by selecting the installed shortcuts.
Click Finish to exit Setup.
🖉 Launch FreeWave WC Toolkit

Figure 8: WC Toolkit Setup Wizard - Installation Complete window

 Click Finish to open WC Toolkit. An Update message appears in the WC Toolkit window is an update is available.

FreeWave WC Toolkit v2.1.2.83 File Options Updates Tool	s Help Update Available
Auto-Detect Device COM Port: COM1 Refresh Select COM Port to Auto-Detect Auto-Detect Device on COM Port	
Select Device	Open Device Window

Figure 9: WC Toolkit - Update Available message

18. Continue with the WC Toolkit Update (on page 3) procedure.

WC Toolkit Update

If the WAVECONTACT device is connected to the internet, WC Toolkit automatically searches for an update for either the WC Toolkit itself or the connected device's firmware.

An **Update Available** message appears if an update is available.

Note: An Update Available message also appears in the Device Configuration window for any connected WAVECONTACT device when an update is available for that device.

The update procedure is the same for the device and WC Toolkit.

- 1. Open the **WC Toolkit** software. The **Update Available** message appears in the window.
- 2. Click the **Update Available** message link.



Figure 10: Click the Update Available message link

The Open File - Security Warning dialog box opens.



Figure 11: Open File - Security Warning dialog box

3. Click Run.

The User Account Control dialog box opens.



Figure 12: User Account Control dialog box

4. Click Yes.

The WC Toolkit update process is very quick. When the update is completed, WC Toolkit re-opens the **Select Device** window showing the updated software version in the WC Toolkit window. (Figure 13)

File Options Updates Tools	Help
Auto-Detect Device COM Port: COM Auto-Detect COM Success Auto-Detect Device on COM Port	FREEWAVE Customer Login: None
Select Device WC45-Gateway	▼ Open Device Window

Figure 13: Select Device window

5. Continue with Setup the Computer IP Address Configuration (on page 3).

Setup the Computer IP Address Configuration

The IP address of the computer used for configuration needs to be set so the computer appears in the same network as the Gateway before configuration can continue.

Note: The images in this procedure are for Windows® 7 and/or Firefox®. The dialog boxes and windows appear differently on each computer.

- 1. On the computer, click the Windows® Start button and select Control Panel.
- 2. View the Control Panel window by Category and click Network and Internet > View Network Status and Tasks.
- 3. Click the Change Adapter Settings link.

Control Panel	Network and Internet + Network a	ind sharing Center	• • 50	arch Control Panel	
File Edit View Tools Help Control Panel Home	View your basic network infe	ormation and set up cor	inections		
Manage wireless networks Change adapter settings	D10XP8W1	freewave.local	Q	See full map	
Change advanced sharing settings	(This computer) View your active networks		Con	nect or disconnect	
	freewave.local	Access Conne	ctions: U Local Area Cor	nection	

Figure 14: Change Adapter Settings Link

4. Double-click the Local Area Connection link.



Figure 15: Local Area Connection Link

The Local Area Connection Status dialog box opens.

Connection —		
IPv4 Connect	ivity:	No Internet access
IPv6 Connect	tvity:	No network access
Media State:		Enabled
Duration:		01:04:30
Speed:		100.0 Mbps
D <u>e</u> tais		
Activity		
Activity ——	Sent —	Received
Activity Bytes:	Sent	

Figure 16: Local Area Connection Status dialog box

5. Click Properties.

- The Local Area Connection Properties dialog box opens.
- 6. Select the Internet Protocol Version 4 (TCP/IPv4) option.

Local Area Connection Properties				
Networking Sharing				
Connect using:				
Intel(R) 82579LM Gigabit Network Connection				
<u>C</u> onfigure				
This connection uses the following items:				
Client for Microsoft Networks				
🗹 🚚 Qo S Packet Scheduler				
Rile and Printer Sharing for Microsoft Networks				
Internet Protocol Version 6 (TCP/IPu6)				
Internet Protocol Version 4 (TCP/IPv4)				
Link-Layer Topology Discovery Mapper 170 Driver				
 Link-Layer Topology Discovery Responder 				
Install				
Description				
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.				
OK Cancel				

Figure 17: Local Area Connection Properties dialog box

7. Click Properties.

The Internet Protocol Version 4 (TCP/IPv4) Properties dialog box opens.

- 8. Make a note of the current settings (to reverse this procedure later).
- 9. Select the Use the following IP address option button.
- 10. In the IP Address text box, enter an IP Address that is in the same subnet range but a DIFFERENT IP Address than the device.

Example: Enter an IP Address from 192.168.1.101 to 192.168.111.254 (but NOT 192.168.1.100) and the Subnet Mask to 255.255.255.0.

Note: The default WAVECONTACT IP Address is **192.168.1.100**. The default subnet mask is **255.255.255.0**.

Internet Protocol Version 4 (TCP/IPv4) Properties
General	
You can get IP settings assigned auto this capability. Otherwise, you need to for the appropriate IP settings.	matically if your network supports ask your network administrator
Obtain an IP address automatical	y
Use the following IP address:	
IP address:	192.168.1.101
Subnet mask:	255.255.255.0
Default gateway:	
 Obtain DNS server address autom 	natically
Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
🔲 Vaļidate settings upon exit	Ad <u>v</u> anced
	OK Cancel

Figure 18: Local Area Connection Properties dialog box

Note: An IP Address is NOT required in the Default Gateway text box.

- 11. Click to save the changes and close the dialog box.
- 12. Click Close twice to close the Local Area Connection Properties and Local Area Connection Status dialog boxes.
- 13. Continue with Change the WC45i-GW-P Password (on page 4).

Change the WC45i-GW-P Password



Warning! If the default password is changed, be careful to type the new password correctly and remember it.

If password is lost the device must be returned to FreeWave to be reset.

Procedure

- 1. Complete the Power and Gateway Connections (on page 1).
- 2. On the computer, complete the Setup the Computer IP Address Configuration (on page 3) procedure.
- 3. Open a web browser.
- 4. In the address bar, enter the Gateway IP Address.

Note: The default WAVECONTACT IP Address is 192.168.1.100.

5. Refresh the browser window (press <F5>). The **Authentication Required** window opens.

Authentication	Required	×
?	http://192.168.1.100 is requesting your username and password. The site says: "config"	
User Name:		
Password:		
	OK Cancel	

Figure 19: Authentication Required window

6. Enter the User Name and Password.

Note: The default User Name is admin and the default Password is freewave.

If the **User Name** or **Password** were changed, enter the applicable information in the appropriate text box.

- Click OK. The FreeWave WC45i Ethernet Module software opens. The Device Status window is active.
- 8. Click the **HTTP** tab.
- 9. Click the **Authentication** button.
- The HTTP Authentication window opens.
- 10. In the URI text box, enter a forward slash (/).
- 11. In the Auth Type area, select the Digest option button.

- 12. In the **Username** text box, type **admin**.
- 13. In the Password text box, type the new password.

Note: If the **User Name** or **Password** were changed, enter the applicable information in the appropriate text box.

The HTTP Authentication window is similar to Figure 20.



Figure 20: HTTP Authentication window with Changed Password

14. Click the **Submit** button.

The window refreshes with a confirmation message.



Figure 21: Updated Confirmation Message

The Authentication Required window opens.

Authentication Required		×
?	http://192.168.1.100 is requesting your username and password. The site says: "config"	
User Name:		
Password:		
	OK	

Figure 22: Authentication Required window

- 15. Enter the User Name and the new Password.
- 16. Click OK.

The **FreeWave WC45i Ethernet Module** software opens. The **Device Status** window is active.

- 17. Optional: Continue with other configuration WC45i-GW-P procedures.
- 18. Logout and close the FreeWave WC45i Ethernet Module software.
- 19. Remove the CAT5e / CAT6 Ethernet cable from the WC45i-GW-P and the computer.
- 20. As applicable, replace the Endpoint cover.
- 21. Mount the Gateway device.

Learn More

For additional product information about the , visit www.freewave.com.

For additional product information or assistance, contact a local reseller, or contact FreeWave Technologies, Inc. at 303-381-9200 or 1-866-923-6168, or by email at moreinfo@freewave.com.

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The WC45i-GW-P complies with FCC Part 15 rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

The WC45i-GW-P must be professionally installed and is only approved for use when installed in devices produced by FreeWave or third party OEMs with the express written approval of FreeWave Technologies, Inc. Changes or modifications should not be made to the device.

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