

Commissioning with PC



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1 Introduction

This document aims to explain the commissioning of WMF weigh module with a PC or laptop via TCP/IP.






Be aware that the TCP/IP connection does not offer all features implementet in the Standard Automation Interface (SAI) protocoll.

Fast Weight Update Channel as an example is not available with a TCP/IP connection.

Further documentation can be downloaded from www.mt.com/WMF

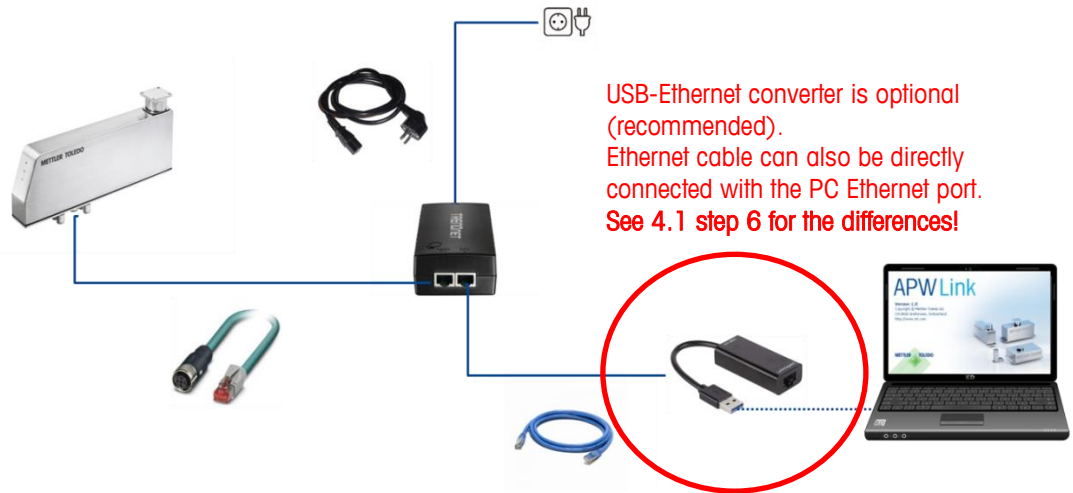
2 Required material

For connection with the weigh module, you will need the following equipment:

Picture	Description	Part number
	WMF weigh module	Various models available (see Datasheet)
	Connection cable for the weigh module (M12 – RJ45, 2 m)	30326112
	PoE injector to supply power to the weigh module Country specific power cable not included!	30326111
	Ethernet patch cable to connect to a PC or laptop	3rd party product
	Ethernet/USB converter to keep the LAN port of the PC or laptop unoccupied (optional)	30326110
	PC or laptop with APW-Link Software v2.3 or higher	Free download link: www.mt.com/apw-link

3 Connect WMF with PC

Do the connections as depicted below:



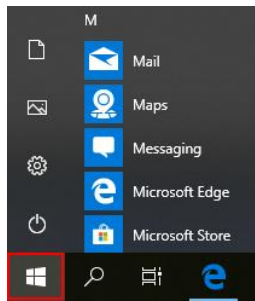
It is recommended to use an USB-Ethernet converter, since you can keep the LAN port of your PC/laptop unoccupied for Internet connection.

Follow the steps below in order to configure the IP address of the Ethernet/USB converter or PC Ethernet port.

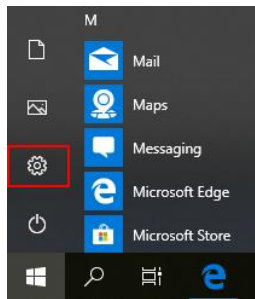
4 PC configuration

4.1 Windows 10 instructions

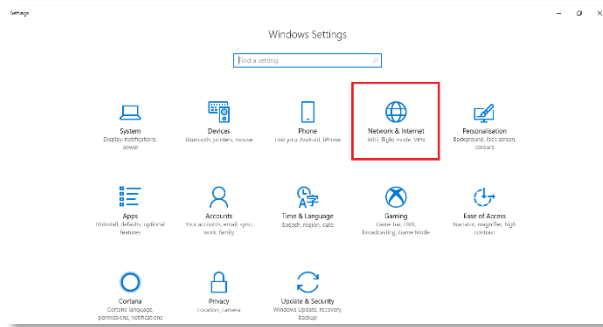
1. Go to your **START** menu



2. Go to **Settings**



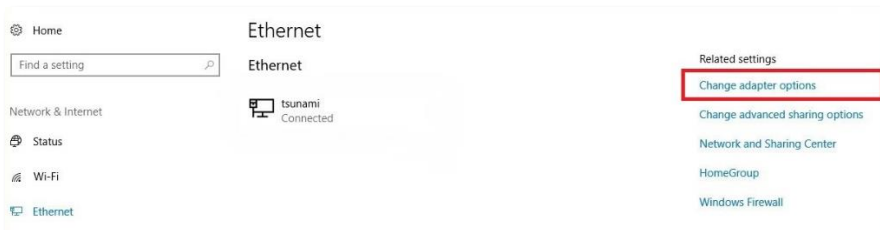
3. Go to Network & Internet



4. Go to Ethernet

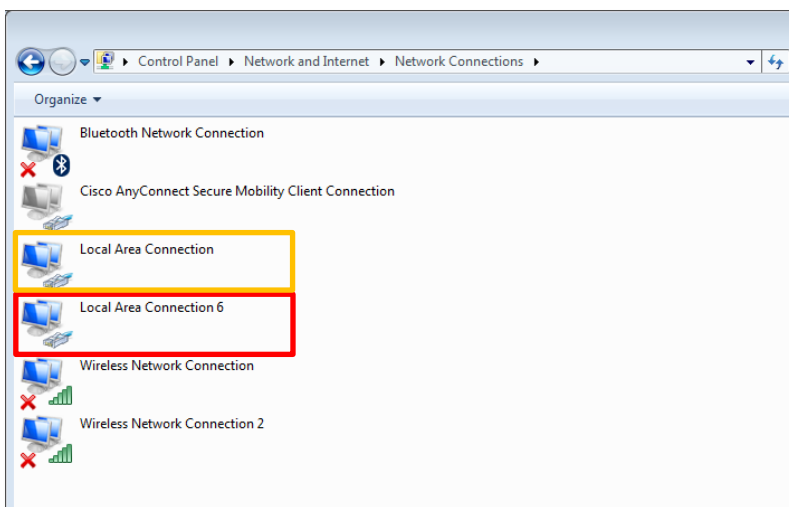


5. Go to Change adapter options

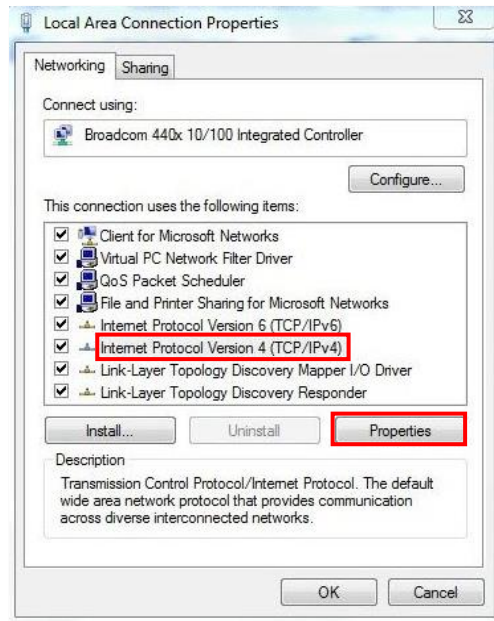


6. Right click on the local area connection depending on your connection and select **properties**:

- **WITH** USB-Ethernet Adapter: select your adapter (if you are not sure which one to select, physically disconnect and reconnect the adapter to see which network appears/disappears)
- **WITHOUT** USB-Ethernet Adapter: select **Local Area Connection**

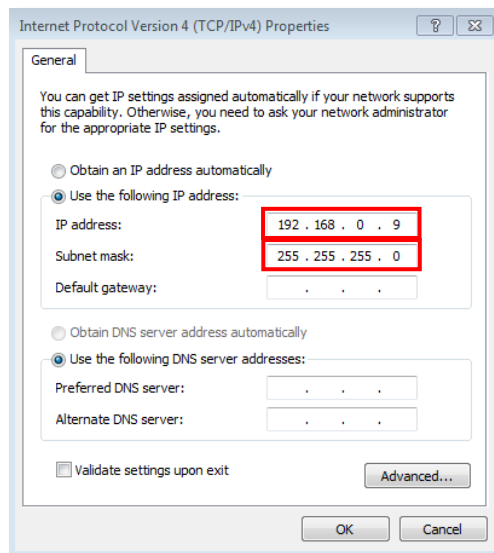


7. Highlight "Internet Protocol Version 4 (TCP/IPv4)" and click **Properties**



8. Assign a fixed IP address to your Ethernet/USB converter. This IP address must be in the same subnet as the IP address of the weigh module.
- Default IP address of the weigh module: 192.168.0.55
 - IP address of the Ethernet/USB converter: 192.168.0.x (last digit must differ from IP address of the weigh module) where x = [0...255]
 - Subnet mask: 255.255.255.0

Click **OK** to save the settings

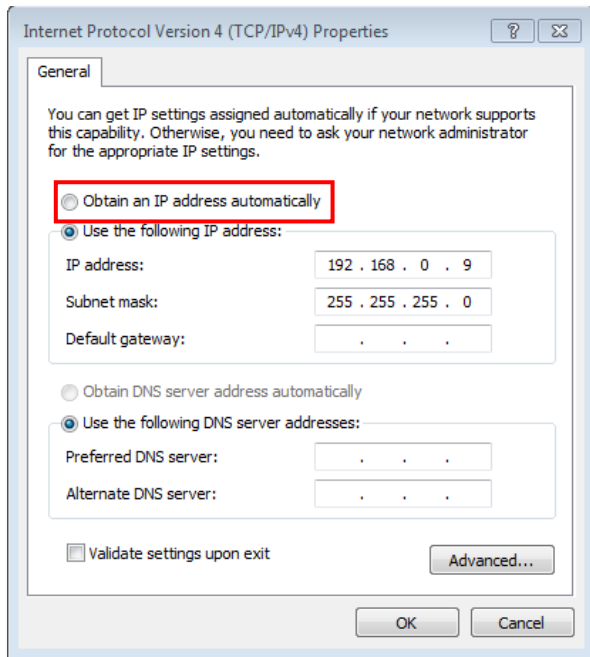


If you are using a **VPN connection** and you cannot connect with the WMF, **disconnect** the VPN connection and try again.

Do not forget to reset your IP configuration after you finished the WMF configuration (see chapter 4.2)

4.2 Reset IP configuration

After you finish the configuration of the weigh module via Ethernet connection, you have to switch back to **automatic IP address assignment** described in step 8 in order to be able to connect to the Internet with your PC or laptop again.



4.3 Windows 8 instructions

1. Use the administrator account credentials to log on to Windows 8 computer, to which static IP and DNS address is to be assigned
2. Click Desktop tile from the Start screen to go to the desktop
3. Once on the desktop screen, hover mouse to the bottom right corner of the window
4. From the displayed options in the right, click Settings
5. Click Control Panel from the Settings pane
6. On Control Panel window, click Network and Internet
7. From the right pane of Network and Internet window, click Network and Sharing Center category
8. From the left pane of Network and Sharing Center window, click Change adapter settings
9. On Network Connections window, right-click the network adapter on which static IP and DNS address is to be configured
10. From the context menu that appears, click Properties
11. Follow Windows 10 description; chapter 4.1 **Step 8**

4.4 Windows 7 instructions

1. Go to your START menu, click "Control Panel"
2. Under "Network and Internet", select "View network status and tasks"
3. Click "Change Adapter Settings" on the left menu bar
4. Follow Windows 10 description; chapter 4.1 **Step 6**

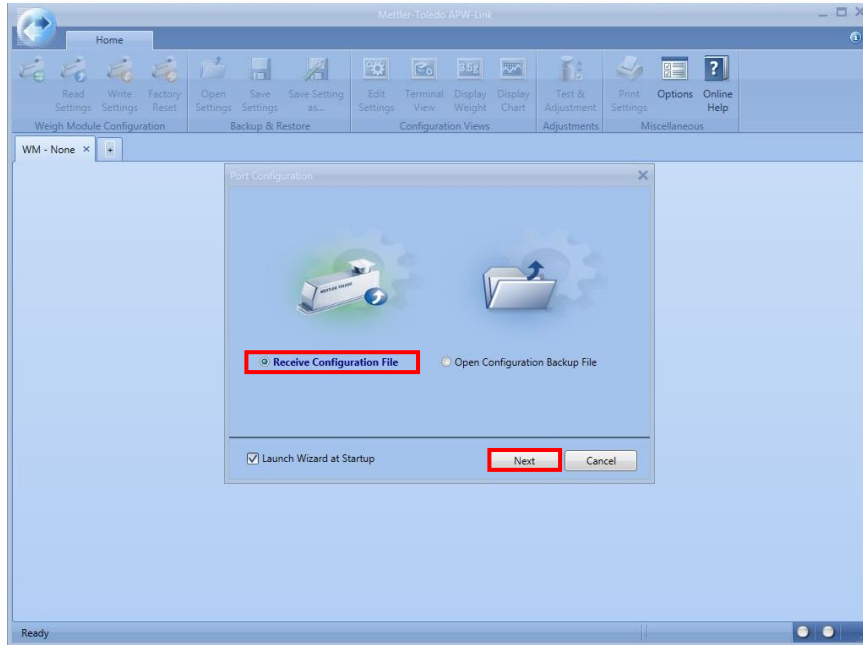
4.5 Windows XP instruction

1. Open Windows Start menu
2. Open Control Panel
3. Classic view: Open Network Connections
4. Category view: Select Network and Internet Connections, and then Network Connections
5. Follow Windows 10 description; chapter 4.1 **Step 6**

5 Connecting WMF with APW-Link

5.1 PROFINET version

1. Open the APW-Link software (free download from: www.mt.com/apw-link)
2. Select Receive Configuration File and click Next

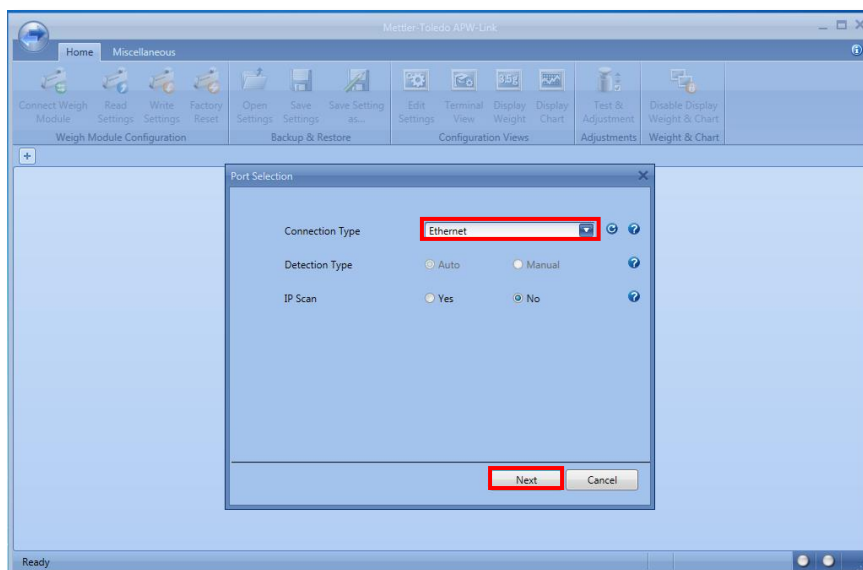


3. Select **Ethernet** in the dropdown menu for the Connection Type

Note:

You can select to perform an IP scan, if you want to connect to multiple weigh modules in the same network. IP scan is not necessary for a single line connection with known IP address of the weigh module.

Click **Next**



4. Enter the following:

- **IP address:** 192.168.0.55 (this is the default IP address of the WMF weigh module, if you have changed the IP address of the WMF, enter the actual IP address here)
- **Port:** 80
- **Source Ethernet card:** 192.168.0.x (that is the address which you have assigned to your PC/laptop or Ethernet/USB adapter before)

Note: Source Ethernet card is displayed only if there are multiple Ethernet ports are available at the same time such as WLAN and LAN or when there is a virtual LAN due to Ethernet/USB converter. If there is only one port available, this option is not displayed.

Click **Next** to connect to the WMF module

The screenshot shows a dialog box titled "Ethernet Settings" with a close button in the top right corner. The dialog contains four configuration fields, each with a help icon to its right:

- IP Address:** A text input field containing "192.168.0.55".
- Port:** A text input field containing "80".
- Source Ethernet Card:** A dropdown menu showing "192.168.0.9".
- End of Line:** A dropdown menu showing "<CR> <LF>".

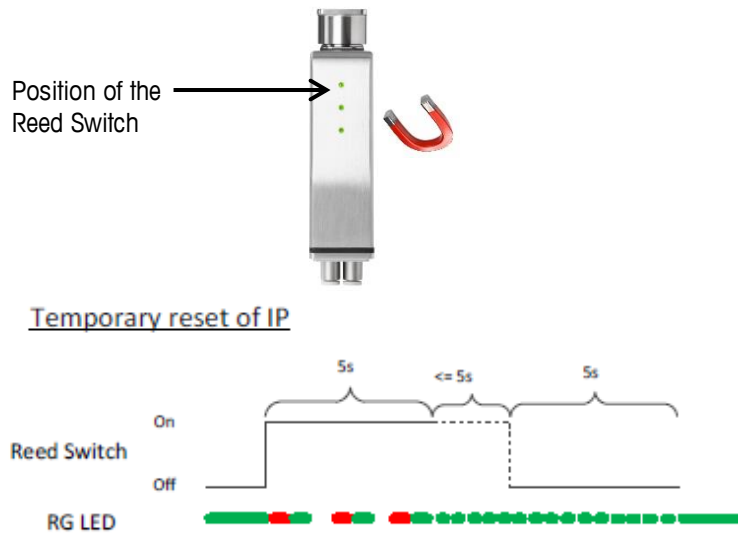
At the bottom of the dialog, there are three buttons: "Back", "Next", and "Cancel". The "Next" button is highlighted with a blue border.

5.2 EtherNet/IP version

You may encounter a problem when trying to establish a connection to the weigh module because in the EtherNet/IP protocol, the DHCP is active by default. This means that the IP address of the weigh module is automatically assigned by the DHCP protocol.

Follow the steps below in order to fix this problem:

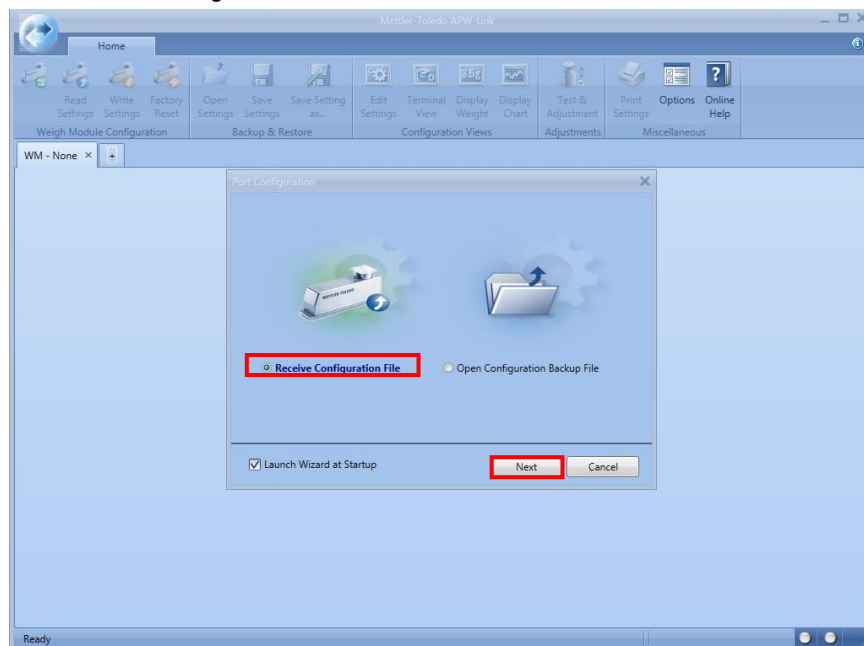
1. Perform a temporary reset of the IP address to default value by holding a magnet close to the back side of the weigh module and following the sequence depicted in the picture below.



Observe the color changes of the above LED during the sequence. At the end of this sequence, the IP address of the weigh module will be reset to the default (192.168.0.55) temporarily.

(A power cycle will cause that the old IP address is assigned to the weigh module again)

2. Open the APW-Link software (free download from: www.mt.com/apw-link)
3. Select Receive Configuration File and click Next

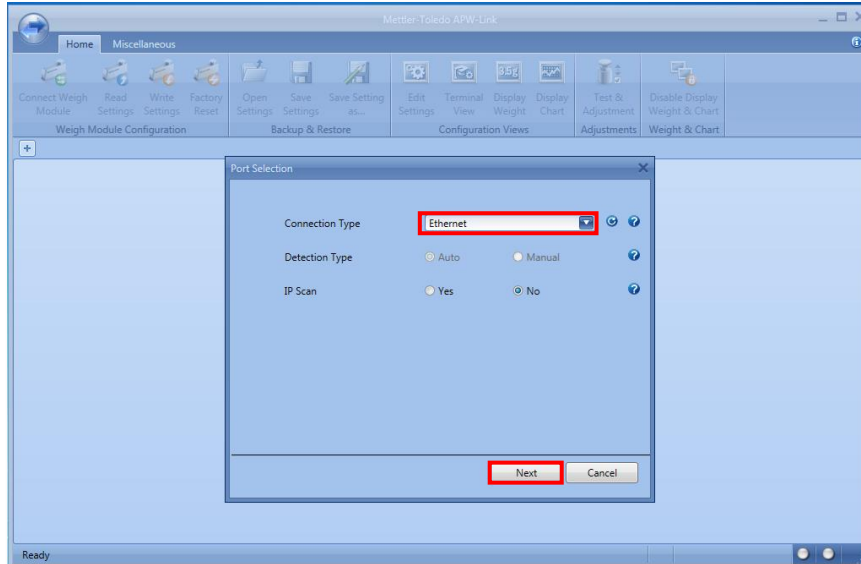


4. Select **Ethernet** in the dropdown menu for the Connection Type

Note:

You can select to perform an IP scan, if you want to connect to multiple weigh modules in the same network. IP scan is not necessary for a single line connection with known IP address of the weigh module.

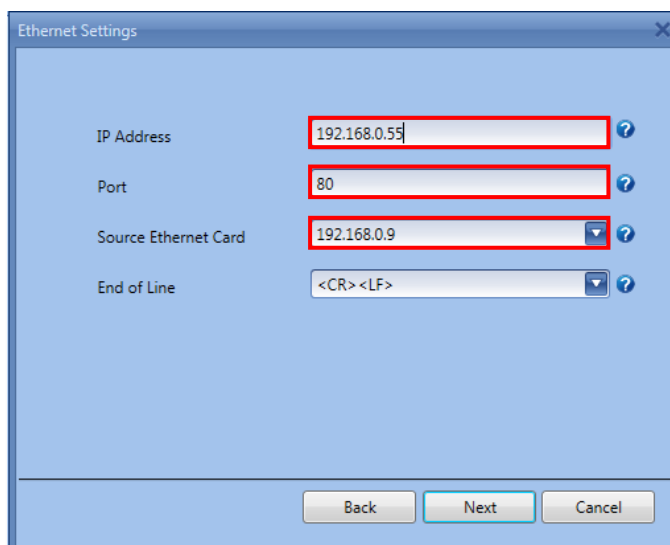
Click **Next**



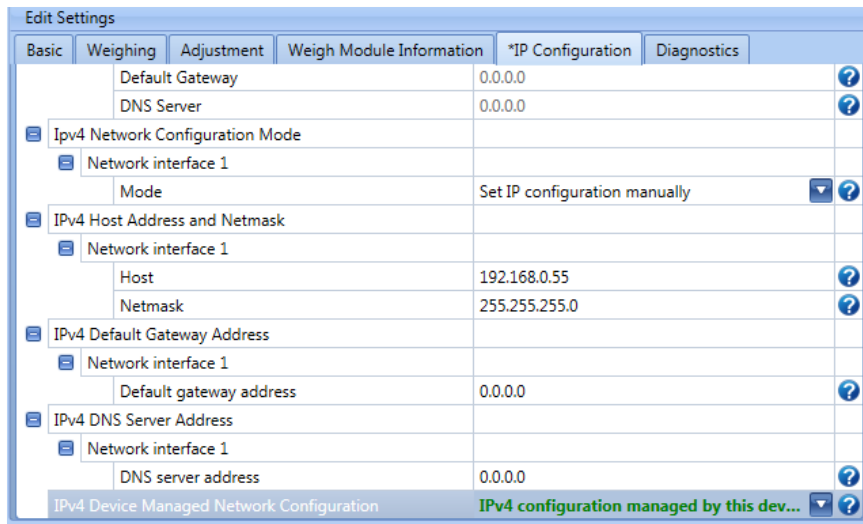
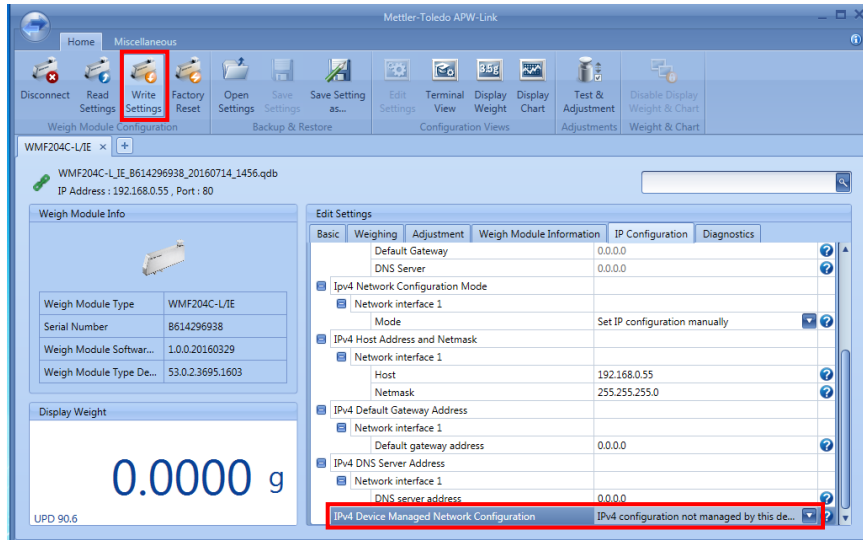
5. Enter the following:
 - **IP address:** 192.168.0.55 (this is the default IP address of the WMF weigh module, if you have changed the IP address of the WMF, enter the actual IP address here)
 - **Port:** 80
 - **Source Ethernet card:** 192.168.0.x (that is the address which you have assigned to your PC/laptop or Ethernet/USB adapter before)

Note: Source Ethernet card is displayed only if there are multiple Ethernet ports are available at the same time such as WLAN and LAN or when there is a virtual LAN due to Ethernet/USB converter. If there is only one port available, this option is not displayed.

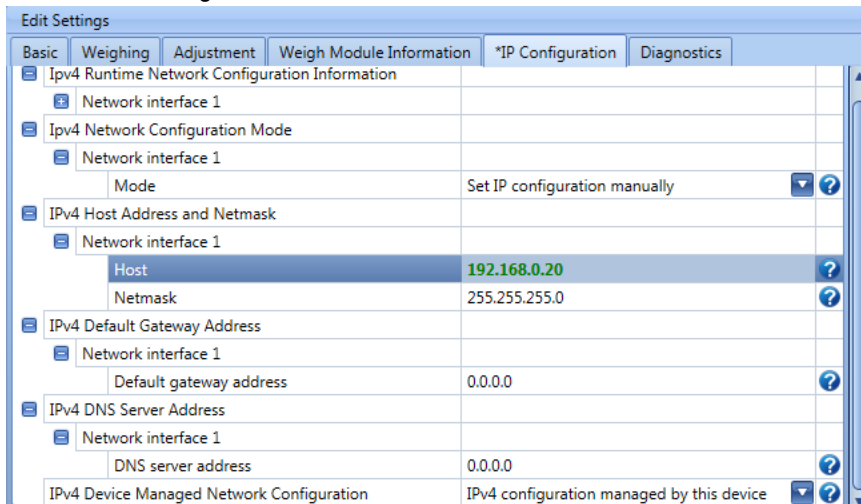
Click **Next** to connect to the WMF module



- In order to prevent that the IP address is overwritten by the DHCP protocol after a power cycle, you can go to the "IP Configuration" tab in APW-Link and select the option "IPv4 configuration managed by this device". Don't forget to write the new settings to the weigh module.



- You can now assign a fixed IP address to the weigh module, which will stay permanent (not change after a power cycle). This step deactivates the DHCP protocol which is responsible for the automatic assignment of the IP address.



www.mt.com

For more information

Mettler-Toledo GmbH

Industrial

CH-8606 Nänikon, Switzerland

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