

MWR-KIT

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Product Instructions

MWR-KIT

4027502206



⚠ WARNING

Read all safety warnings and instructions

Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference

Atlas Copco

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Product Information

General Information

⚠ WARNING Risk of Property Damage or Severe Injury

Ensure that you read, understand and follow all instructions before operating the tool. Failure to follow all the instructions may result in electric shock, fire, property damage and/or severe bodily injury.

- ▶ Read all Safety Information delivered together with the different parts of the system.
- ▶ Read all Product Instructions for installation, operation and maintenance of the different parts of the system.
- ▶ Read all locally legislated safety regulations regarding the system and parts thereof.
- ▶ Save all Safety Information and instructions for future reference.

Safety Signal Words

The safety signal words **Danger**, **Warning**, **Caution**, and **Notice** have the following meanings:

DANGER	DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	NOTICE is used to address practices not related to personal injury.

Warranty

- Product warranty will expire 12+1 months after dispatch from Atlas Copco's Distribution Center.
- Normal wear and tear on parts is not included within the warranty.
 - Normal wear and tear is that which requires a part change or other adjustment/overhaul during standard tools maintenance typical for that period (expressed in time, operation hours or otherwise).
- The product warranty relies on the correct use, maintenance, and repair of the tool and its component parts.
- Damage to parts that occurs as a result of inadequate maintenance or performed by parties other than Atlas Copco or their Certified Service Partners during the warranty period is not covered by the warranty.
- To avoid damage or destruction of tool parts, service the tool according to the recommended maintenance schedules and follow the correct instructions.
- Warranty repairs are only performed in Atlas Copco workshops or by Certified Service Partners.

Atlas Copco offers extended warranty and state of the art preventive maintenance through its ToolCover contracts. For further information contact your local Service representative.

For electrical motors:

- Warranty will only apply when the electric motor has not been opened.

ServAid

ServAid is a portal that is continuously updated and contains Technical Information, such as:

- Regulatory and Safety Information
- Technical Data
- Installation, Operation and Service Instructions

- Spare Parts Lists
- Accessories
- Dimensional Drawings

Please visit: <https://servaid.atlascopco.com>.

For further Technical Information, please contact your local Atlas Copco representative.

Country of Origin

For the Country of Origin, please refer to the information on the product label.

Dimensional Drawings

Dimensional Drawings can be found either in the Dimensional Drawings Archive, or on ServAid.

Please visit: <http://webbox.atlascopco.com/webbox/dimdrw> or <https://servaid.atlascopco.com>.

Overview

Application

The MWR-KIT is a gateway between the Power Focus 6000 and the Mechatronic Wrench (MWR). The Tightening program is configured on Power Focus 6000 and sent to the MWR by the MWR-KIT. A Web Graphical User Interface (Web GUI) allows the operator to configure all the parameters for the connection between the MWR and the Power Focus 6000. The MWR-KIT allows to connect up to six wrenches according to Power Focus 6000 tool management.

 Only two wrenches can be used at the same time.

Factory port

The Factory port allows to connect the MWR-KIT to the Power Focus 6000 via network or directly to the Factory port of the controller.

For more information, please refer to the *Settings page [Page 12]* paragraph.

Reset button

The Reset button allows to reset the default configuration of the MWR-KIT.

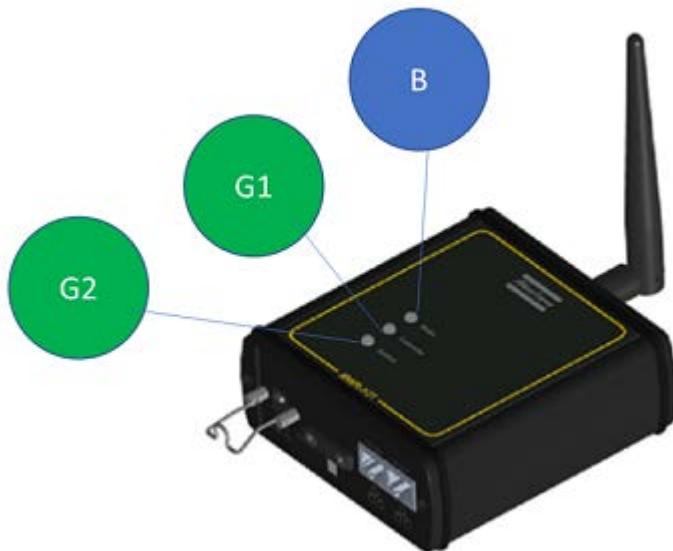
To start the reset process, press the Reset button for more than 10 s.

 During the reset process, the current configuration of the MWR-KIT is deleted.

Service port

The service port allows to connect the MWR-KIT to a PC via network, or directly to the Ethernet port of the PC, to be configured using the Web GUI.

LEDs



On the MWR-KIT, three LEDs are available:

B	Blue LED: Radio (radio activity)	G1	Green LED: Controller (Power Focus 6000 connection)
G2	Green LED: System (job active)		

LEDs behavior:

- Blue LED (B): switched on when an exchange of information between MWR-KIT and MWR using radio frequencies is active.
- Green LED (G1): switched on when MWR-KIT has an active connection to Power Focus 6000 and a MWR is linked correctly.
- Green LED (G2): switched on when the tightening program or sequence is running.

Status	B	G1	G2
Boot loader	Off	On for 2 s	Off

Startup

Status	B	G1	G2
Radio activity ok	Blinking	--	--
One or many active DASP connections to Power Focus 6000 (with linked MWR)	--	On	--
All selected tools successfully configured	--	--	On
Device on – no DASP connection	Off	Blinking	Off

Normal operations

Status	B	G1	G2
System error (assert/crash)	Off	Off	Off
System in configuration mode	--	Off	Blinking
No tool selected (linked)	Off	--	Off

Status	B	G1	G2
For one of linked tools one of the following conditions verifies: ■ Wrench is offline ■ Wrench is out of range ■ Wrench is not ready to be activated ■ Wrench is not configured in a virtual station (only linked to MWR-KIT)	--	--	Blinking
SD card access error (R/W fail)	On	--	--

Errors

SD card

The SD card contains the device configuration (mwrkit.cfg file). On the SD card up to 5 MWR firmware releases can be stored. The configuration also includes a full description of the configuration parameters and the file format. The SD card is also used for FW upgrade.

- i** The SD card is not accessible by the user.

Technical specification

- All MWR-TA (torque - angle) and MWR-S (signal) models are supported.
- Memory capacity: 16 GB
- Average radio range: 5 m
- Rated input voltage: 6-24 Vdc
- Rated input power: 1 W
- Rated current: 0.180 A

Environmental

- Indoor Use ONLY
- Pollution Degree 2
- Room Temperature: 5 °C to 40 °C (41 °F to 104 °F)
- Maximum relative humidity 80% for temperature up to 31 °C (88 °F) decreasing linearly to 50% relative humidity at 40 °C (104 °F)
- Altitude: Up to 2000 m

Radio module frequencies

- i** Refer to the local Regulatory Domain for frequency selection.

Europe

Number	Channel	Frequency [MHz]	Data rate [bit/s]
9	51	868.034	19200
10	56	868.297	19200
11	60	868.502	19200
12	64	868.706	19200

Number	Channel	Frequency [MHz]	Data rate [bit/s]
13	69	869.006	19200
15	82	869.573	19200
16	84	869.840	19200

USA

Number	Channel	Frequency [MHz]	Data rate [bit/s]
9	2	902.791	19200
10	9	906.478	19200
11	10	907.004	19200
12	17	910.691	19200
13	20	912.271	19200
14	31	918.064	19200
15	32	918.590	19200
16	46	925.963	19200

Interfaces

- Ethernet ports (Factory port and Service port)
- Wave flexible antenna connector
- Power supply connector

Accessories

Antenna

- Default: Antenna MWRKIT (SMA) 868/915 MHz
- Cable: Cable Antenna 2.5m (BNC) 868/915 MHz
- Extended: Extended Cable Antenna 5m 868/915 MHz

All antennas are tested and suitable for the USA, Canada and the EU.

Maximum power in dBm:

Antenna	EU channels	US channels
Default	10	5
Cable	7	5
Extended	0	5

Power cable for Power Focus 6000

The power cable allows to connect the MWR-KIT to the Power Focus 6000.

To supply power to the MWR-KIT:

1. Turn the power switch of the Power Focus 6000 off and open the front cover of the controller.
2. Connect the white termination of the power cable to the OUT 24V interface of the Power Focus 6000.
3. Connect the black termination of the power cable to the OUT 0V interface of the Power Focus 6000.
4. Connect the spring loading termination of the power cable to the MWR-KIT power supply interface.

i For more information on the controller interfaces, please refer to the Power Focus 6000 Product Instructions.

Installation

Installation Instructions

Preparations

The MWR-KIT is equipped with an installation kit.

For the installation of the MWR-KIT, a Torx T10 screwdriver and the following parts of the installation kit are required:

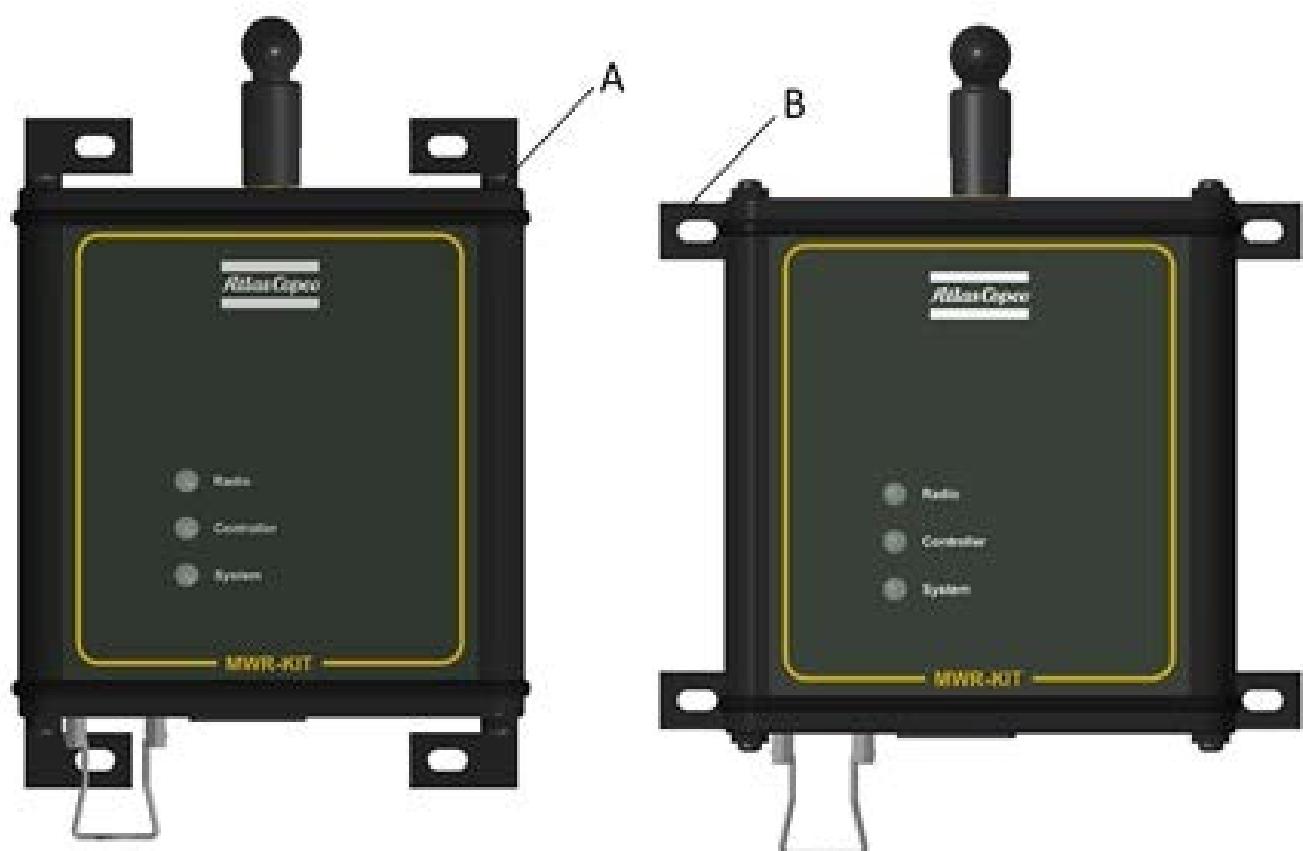
- 4 brackets
- 4 screws M3x18
- 4 seals length 4.5 mm

i (English) This device is a mobile radio station and should be installed and operated such that a minimum separation distance of 5 mm is maintained between the device and the operator. Atlas Copco recommends to install and operate the device such that a separation distance of 20 cm is maintained between the device and the operator.

(French) Cet équipement est une station de radio mobile et devra être installé et fonctionner de telle manière qu'une distance minimale de séparation de 5 mm soit maintenue entre l'appareil et l'opérateur. Atlas Copco recommande d'installer et fonctionner cet équipement de telle manière qu'une distance de séparation de 20 cm soit maintenue entre l'appareil et l'opérateur.

Installing the unit

Install the MWR-KIT on a vertical surface (for example a wall) or an horizontal surface (for example a table) in one of the following configurations:



A Inward brackets configuration

B Outward brackets configuration

Refer to the following instructions to install the brackets in the inward or outward configuration, making sure to respect the order of the screws, brackets, and seals as shown in the image below:



1. From the MWR-KIT, remove the four caps where the brackets have to be installed (bottom and top sides for the inward configuration, or lateral sides for the outward configuration).
2. Using a Torx T10 screwdriver, remove the four M3x10 screws from the MWR-KIT.
3. Insert the M3x18 screw provided in the installation kit in the designated bracket hole.
4. Slide the 4.5 mm seal over the screw, so that the screw and the bracket are locked together.
5. Insert the screw in one of the screw holes on the MWR-KIT sides and fasten it using a Torx T10 screwdriver.

Repeat the procedure from step 3 to 5 to install all brackets.

Operation

Ergonomic Guidelines

Consider your workstation as you read through this list of general ergonomic guidelines to identify areas for improvement in posture, component placement, or work environment.

- Take frequent breaks and change work positions frequently.
- Adapt the workstation area to your needs and the work task.
 - Adjust for a convenient reach range by determining where parts and tools need to be located to avoid static load.
 - Use workstation equipment such as tables and chairs appropriate for the work task.
- Avoid work positions above shoulder level or with static holding during assembly operations.
 - When working above shoulder level, reduce the load on the static muscles by lowering the weight of the tool, using for example torque arms, hose reels or weight balancers. You can also reduce the load on the static muscles by holding the tool close to the body.
 - Take frequent breaks.
 - Avoid extreme arm or wrist postures, particularly during operations requiring a degree of force.
- Adjust for a convenient field of vision that requires minimal eye and head movements.
- Use appropriate lighting for the work task.
- Select the appropriate tool for the work task.
- In noisy environments, use ear protection equipment.
- Use high-quality inserted tools and consumables to minimize exposure to excessive levels of vibration.
- Minimize exposure to reaction forces.
 - When cutting:
A cut-off wheel can get stuck if the cut-off wheel is bent or not guided properly. Use the correct flange for the cut-off wheel and avoid bending the cut-off wheel during operation.
 - When drilling:
The drill might stall when the drill bit breaks through. Use support handles if the stall torque is high. The safety standard ISO11148 part 3 recommends using a device to absorb a reaction torque above 10 Nm for pistol grip tools and 4 Nm for straight tools.
 - When using direct-driven screwdrivers or nutrunners:
Reaction forces depend on the tool settings and joint characteristics. Strength and posture determine the amount of reaction force that an operator can tolerate. Adapt the torque setting to the operator's strength and posture and use a torque arm or reaction bar if the torque is too high.
- In dusty environments, use a dust extraction system or wear a mouth protection mask.

Configuration Instructions

Web GUI

The MWR-KIT configuration can be changed by using the Web GUI. This user interface allows to configure the MWR-KIT and the MWR to use.

To access the Web GUI, open a browser and type the MWR-KIT IP address.

i If the page is not correctly displayed, reload the page pressing the F5 button on the PC keyboard.

List of supported browsers:

- Explorer
- Chrome
- Edge

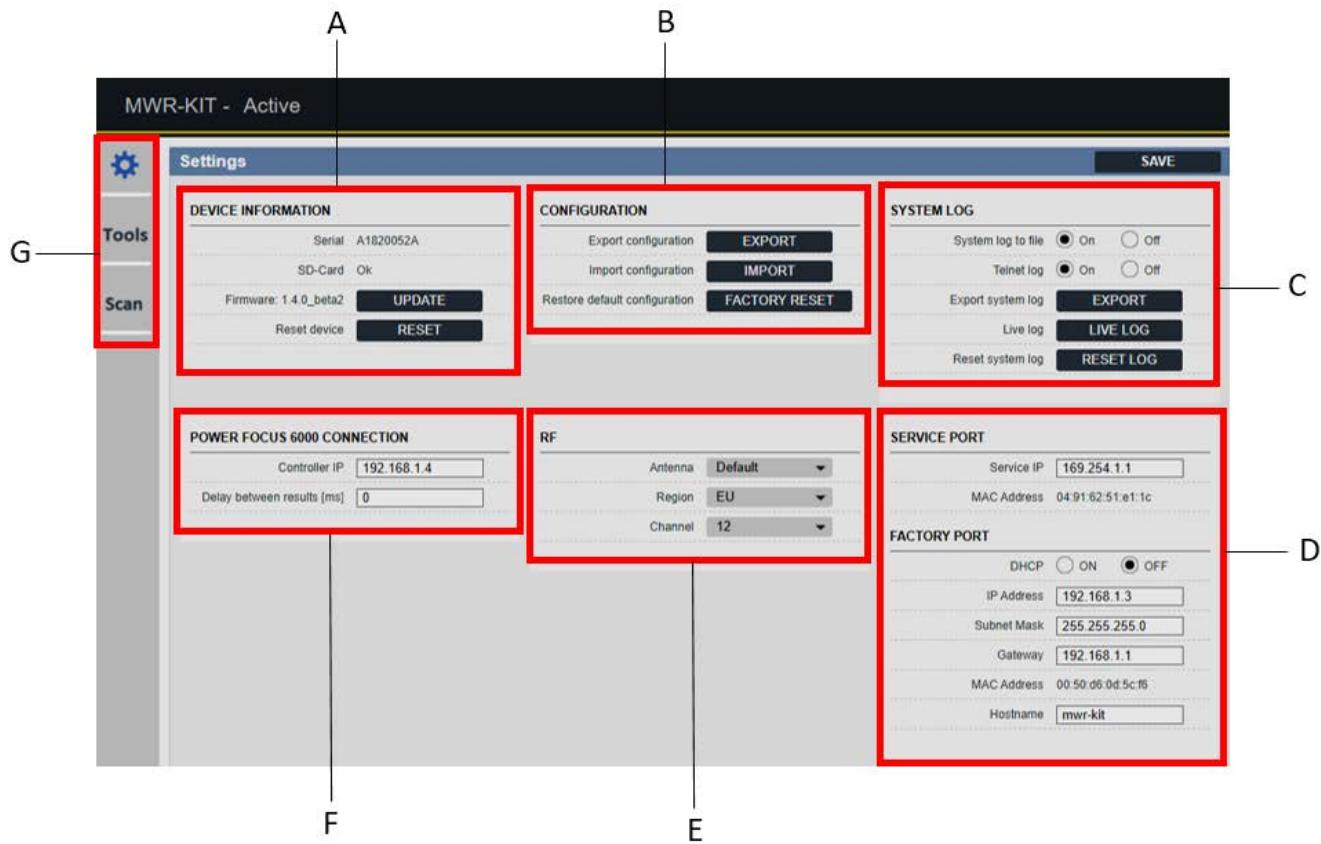
- Firefox
- Opera

Accessing the web GUI

1. Connect the MWR-KIT to the power supply by external supply.
2. Connect the MWR-KIT Service port to the PC by Ethernet cable.
3. Configure the PC on the same network of the MWR-KIT.
4. On the PC, open a browser page. Then in the URL box, type the IP address of the MWR-KIT.

The Tools page of the MWR-KIT web GUI opens.

Settings page



Device information

- Serial: serial number of the MWR-KIT. This is a read-only field.
- SD-Card: SD-Card status.
- Firmware: firmware version of the MWR-KIT.

Click on the Update button to update the MWR-KIT firmware version.

- Reset device: click on the Reset button to exit the Configuration mode and restore the Active mode.

i When the device is reset, unsaved settings are discarded.

Configuration

- Export configuration: click on the Export button to export the MWR-KIT file configuration.
- Import configuration: click on the Import button to import the MWR-KIT file configuration.
- Restore default configuration: click on the Factory reset button to restore the factory settings.

System log

- System log to file: enable/disable the System log to file. The default value is ON.
- Telnet log: enable/disable the Telnet log. The default value is ON.
- Export system log: click on the Export system log button to export the system log.
- Live log: click on the Live log button to show live, log session.
- Reset system log: click on the Reset system log button to reset the system log.

Power Focus 6000 Connection

- Controller IP: IP address of the controller.
- Delay between results [ms]: set a value ranging from 0 to 10000 ms. This parameter allows to assign different timestamp to the results displayed on the Power Focus 6000.

RF

- Antenna: set the antenna in use.
- Region: set the region of the working channels.
- Channel: set the channel of the MWR-KIT communication.

i Always update first the communication channel of the MWR, and then the MWR-KIT channel accordingly.

Service port

- Service IP: IP address of the MWR-KIT Service port.
By default, the IP address is 169.254.1.1
- MAC address: MAC address of the MWR-KIT Service port . This is a read-only field.

Factory port

- DHCP: enable/disable the DHCP. The default value is OFF.
- IP address: IP address of the MWR-KIT Factory port.
By default, the IP address is 169.254.1.2
- Subnet mask: set the subnet mask address.
By default, the IP address is 255.255.0.0
- Gateway: set the gateway address.
- MAC address: MAC address of the MWR-KIT Factory port. This is a read-only field.
- Hostname: insert the hostname of the MWR-KIT .

Scan page

A	Menu bar	B	Scan
C	Tools		

Scan

- EU channels: scan the channels available in the EU region.
- US channels: scan the channels available in the US.
- JAP channels: scan the channels available in Japan.
- Extended scan: scan all the available channels.

i To start the scan of the channels, click on the Start scan button.

During the scanning of the channels, the MWR-KIT mode changes from Configuration to Scanning:

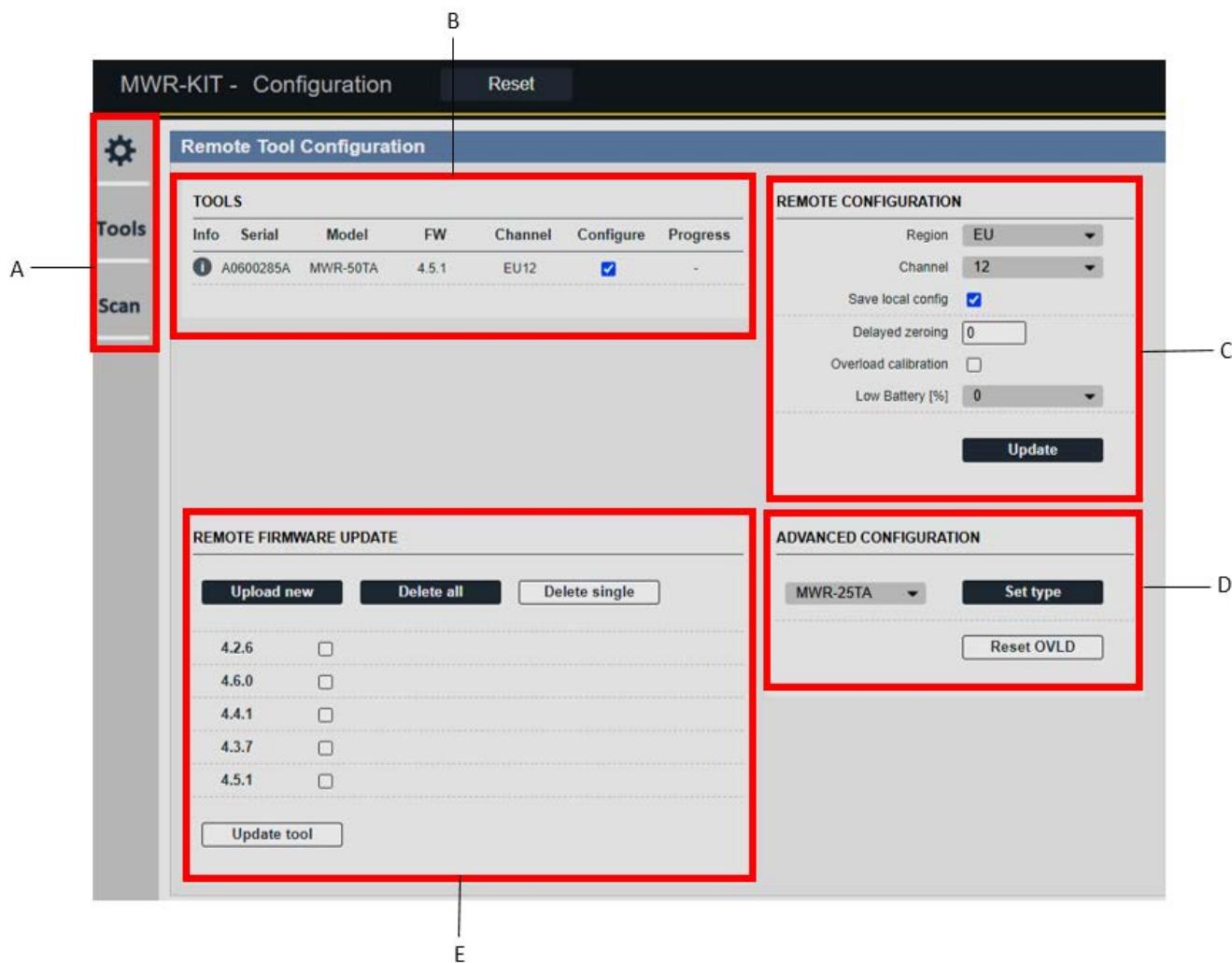


Tools

- Info: click on the information icon to display the Tool Details. The icon turns red when there is an active tool alarm, refer to the paragraph Troubleshooting for more information.
- Serial: serial number of the MWR.
- Model: model of the MWR.
- FW: firmware of the MWR.
- Channel: channel of the linked MWR.
- Select: select one or more check boxes to configure the radio channel or to upgrade the firmware of one or more MWR.

i To configure one or more tools selected, click on the Configure button.

After clicking on the Configure button, the following page opens:



A	Menu bar	B	Tools
C	Remote configuration	D	Advanced configuration
E	Remote firmware update		

Remote configuration

- Region: set the region of the working channels.
- Channel: set the channel of the MWR-KIT communication.
- Save local config: select the check box to save the local configuration on the device.
- Delayed zeroing: set the seconds to start the Delayed zeroing of the wrench in cradle mode.
- Overload calibration: it enables the self-test in cradle when there is an overload.

If the MWR is not damaged, the cradle allows to reset it and the MWR becomes available again. Otherwise, the MWR becomes unavailable. In both cases the overload calibration data is stored.

- Low Battery [%]: set a percentage to activate the low battery level alarm.

Advanced configuration

This section is reserved to Atlas Copco Service Personnel.

Remote firmware update

From this section it is possible to upload, update and delete MWR firmware versions. Refer to *Uploading the MWR firmware [Page 18]*, *Updating the MWR firmware [Page 18]* and *Deleting the MWR firmware [Page 19]*.

Tools page

Selected tools

MWR-KIT - Active

Tool configuration

SELECTED TOOLS

Info	Serial	Model	Linked	PF6000	RSSI	Last Seen	Locked	In Cradle	Battery	
1	A9720052A	-	Linked	-	-42/-48	1	Locked	-	85%	REMOVE
1	A6800005A	-	Linked	-	-59/-48	3	Locked	In Cradle	85%	REMOVE
1	A0410666A	-	Linked	-	-44/-48	0	Locked	-	71%	REMOVE

BUSY TOOLS

Info	Serial	Model	Linked	PF6000	RSSI	Last Seen	Locked	In Cradle	Battery	
1	A7440019A	MWR-25TA	A24903921	-	-71/-66	0	Locked	-	85%	UNLINK
1	A0600285A	MWR-50TA	A24903921	-	-74/-92	16	Locked	-	71%	UNLINK

AVAILABLE TOOLS

Info	Serial	Model	Linked	PF6000	RSSI	Last Seen	Locked	In Cradle	Battery	
1	B1600177A	MWR-25TA	-	-	-68/-52	3	Locked	-	85%	SELECT
1	A0580383B	MWR-50T	-	-	-67/-48	2	Locked	-	0%	

A	Selected tools	B	Busy tools
C	Available tools	D	Menu bar

- Info: click on the information icon to display the Tool Details. The icon turns red when there is an active tool alarm, refer to the paragraph Troubleshooting for more information.
- Serial: serial number of the MWR.
- Model: model of the MWR.
- Linked: status of the MWR.
- PF6000: status of the controller.
- RSSI: Received Signal Strength Indication of the linked MWR (indicated in dBm).
- Last seen: time in seconds passed from the last ping sent by the MWR to the controller (Keep alive mode).
- Locked: status of the disabled wrenches.
- In cradle: selected if the MWR is on the MWR Charging Cradle.
- Battery: percentage of the MWR battery.

i To remove a MWR from the Selected tools list, click on the Remove button.

Busy Tools

- Info: click on the information icon to display the Tool Details.
- Serial: serial number of the MWR.
- Model: model of the MWR.
- Linked: status of the MWR.
- PF6000: serial number of the Power Focus 6000 the MWR is linked with.
- RSSI: Received Signal Strength Indication of the busy MWR (indicated in dBm).

- Last seen: time in seconds passed from the last ping sent by the MWR to the controller (Keep alive mode).
- Locked: status of the disabled wrenches.
- In cradle: selected if the MWR is on the MWR Charging Cradle.
- Battery: percentage of the MWR battery.

i To remove a tool from the Busy tools list, click on the Unlink button. The MWR will be unlinked from its current controller.

Available tools

- Info: click on the information icon to display the Tool Details.
- Serial: serial number of the MWR.
- Model: model of the MWR.
- Linked: status of the MWR.
- PF6000: status of the controller.
- RSSI: Received Signal Strength Indication of the available MWR (indicated in dBm).
- Last seen: time in seconds passed from the last ping sent by the MWR to the controller (Keep alive mode).
- Locked: status of the disabled wrenches.
- In cradle: selected if the MWR is on the MWR Charging Cradle.
- Battery: percentage of the MWR battery.

i To add a MWR to the Selected tools list, click on the Select button.

i MWR-T models are not supported and cannot be added to the Selected tools list.

Connecting a tool

1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select Tools.
3. In the Available tools section of the Tool configuration page, click on the Select button of the MWR to link.

The MWR is now linked and displayed in the Selected tools table of the Tool configuration page.

Removing a linked tool

1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select Tools.
3. In the Selected tools section of the Tool configuration page, click on the Remove button of the MWR to disconnect.

The MWR is now unlinked and displayed in the Available tools table of the Tool configuration page.

Updating the communication channel

1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select Scan.

3. In the Scan section of the Wrench scan page, select the checkbox of the region where to scan the available wrenches.

Then, click on the Start Scan button.

i In the upper-left part of the MWR-KIT page, the status changes from the Active mode to the Configuration mode and the progress of the Scanning process is displayed in percentage.

The MWR detected during the Scanning process are displayed in the Tools section of the Wrench scan page.

4. In the Tools section, select the MWR to update with the new channel.

Then, click on the Configure button.

5. In the Remote configuration section, select a channel from the Channel drop down list.

6. In the Remote configuration section, select/deselect the Save local config checkbox to enable/disable the saving of the MWR communication channel on the MWR-KIT

i If the Save local config checkbox is not selected, the channel is set but not stored.

Then click on the Update button.

i To exit the Configuration mode and return to the Active mode, click on the Reset button placed in the upper-left part of the page.

Uploading the MWR firmware

i The maximum number of tool firmware versions that can be stored on the SD card of the MWR-KIT is five.

1. Access the MWR-KIT web GUI.

2. From the main menu on the left side of the MWR-KIT page, select Scan.

3. In the Scan section of the Wrench scan page, select the checkbox of the region where to scan the available wrenches.

Then, click on the Start Scan button.

i In the upper-left part of the MWR-KIT page, the status changes from the Active mode to the Configuration mode and the progress of the Scanning process is displayed in percentage.

The MWR detected during the Scanning process are displayed in the Tools section of the Wrench scan page.

4. In the Tools section, click on the Configure button.

5. In the Remote firmware update section, click on the Upload new button.

6. In the Upload MWR firmware dialog box, click on the Open (.emh) button and select the .emh file to upload.

Then, click on the Open (.dat) button and select the .dat file to upload.

i Upload both the .emh file and the .dat file. Both files must belong to the same firmware release.

7. When the two files are selected, click on the Upload button.

The MWR firmware is saved on the SD card of the MWR-KIT.

i To exit the Configuration mode and return to the Active mode, click on the Reset button placed in the upper left-part of the page.

Updating the MWR firmware

1. Access the MWR-KIT web GUI.

2. From the main menu on the left side of the MWR-KIT page, select Scan.

3. In the Scan section of the Wrench scan page, select the checkbox of the region where to scan the available wrenches.

Then, click on the Start Scan button.

i In the upper-left part of the MWR-KIT page, the status changes from the Active mode to the Configuration mode and the progress of the Scanning process is displayed in percentage.

The MWR detected during the Scanning process are displayed in the Tools section of the Wrench scan page.

4. In the Tools section, select the MWR to upgrade.

Then, click on the Configure button.

5. In the Remote firmware update section, select one of the tool firmware available on the SD card of the MWR-KIT. Then click on the Update button.

The update progress in % is visible in the MWR Tools section.

i To exit the Configuration mode and return to the Active mode, click on the Reset button placed in the upper left-part of the page.

Deleting the MWR firmware

1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select Scan.
3. In the Scan section of the Wrench scan page, select the checkbox of the region where to scan the available wrenches.

Then, click on the Start Scan button.

i In the upper-left part of the MWR-KIT page, the status changes from the Active mode to the Configuration mode and the progress of the Scanning process is displayed in percentage.

The MWR detected during the Scanning process are displayed in the Tools section of the Wrench scan page.

4. In the Tools section, click on the Configure button.

5. In the Remote firmware update section, click on the Delete all button, or select a specific firmware version and click on the Delete single button.

i To exit the Configuration mode and return to the Active mode, click on the Reset button placed in the upper left-part of the page.

Upgrading the MWR-KIT firmware

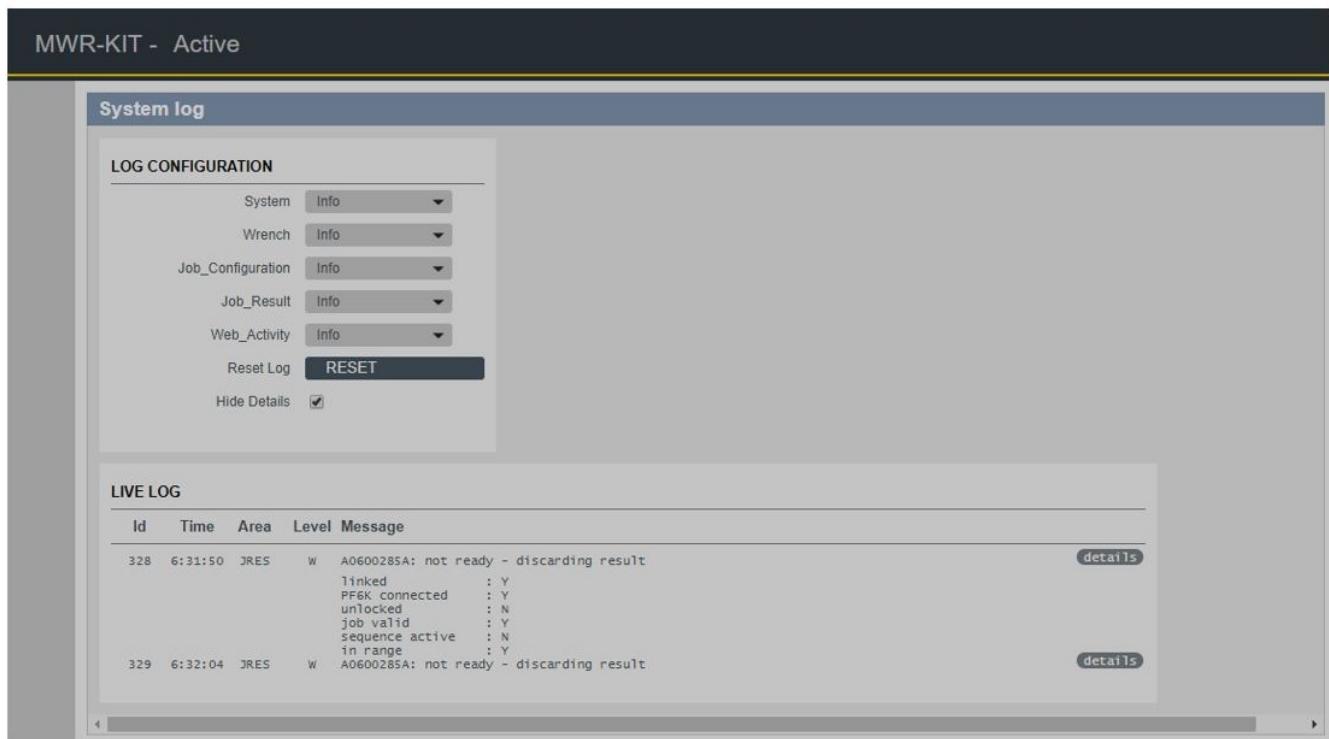
1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select the Settings icon.
3. In the Settings page, click the Update button.
4. In the Upload firmware dialog box, click on Open. Then select the MWR-KIT firmware file.
5. After the MWR-KIT firmware file is selected, click the Upload button.

Configuring the MWR-KIT system log

1. Access the MWR-KIT web GUI.
2. From the main menu on the left side of the MWR-KIT page, select the Settings icon.
3. In the System log section of the Settings page, click the Live log button.
4. In the Log configuration dialog box, a drop down menu for each parameter is shown. Set the preference parameters between: Info, Warning, Error, None.
5. In the Log configuration dialog box, select the Hide details check box to hide the details of the Live log.

6. If the Hide details check box is selected, click the Details button on the Live log dialog box to show the log details.

i If the Hide details check box is unchecked, the Live log details are automatically shown.



The screenshot shows the 'System log' configuration window. It includes a 'LOG CONFIGURATION' section with dropdowns for 'System' (Info), 'Wrench' (Info), 'Job_Configuration' (Info), 'Job_Result' (Info), and 'Web_Activity' (Info). There is a 'Reset Log' button and a 'Hide Details' checkbox (which is checked). Below this is a 'LIVE LOG' table with columns: Id, Time, Area, Level, and Message. The table contains two entries:

Id	Time	Area	Level	Message	details
328	6:31:50	JRES	W	A0600285A: not ready - discarding result linked : Y PF6K connected : Y unlocked : N job valid : Y sequence active : N in range : Y	details
329	6:32:04	JRES	W	A0600285A: not ready - discarding result	details

Operating Instructions

Executing a tightening operation

1. Configure the MWR and the Power Focus 6000 on the MWR-KIT by using the Service port connected to the PC
2. Connect the MWR-KIT to the Power Focus 6000 by using the Factory ports of the two devices.
3. Configure a Program on Power Focus 6000.
4. Do the tightening.

Service

Maintenance Instructions

Cables and connection ports

Check the status of the cables and the connections regularly, according to the use of the device.

Troubleshooting

SD card status: Error

Solution: restart the MWR-KIT. If the error persists, contact Atlas Copco Service Personnel for assistance.

Model unsupported

Cause: MWR model is not supported by MWR-KIT / Power Focus 6000.

Service required

Solution: contact Atlas Copco Service Personnel for assistance.

Battery low

Cause: MWR battery level is low.

Solution: recharge MWR battery.

Tool calibration required (date)

Cause: MWR calibration date has expired.

Solution: contact Atlas Copco Service Personnel to calibrate the MWR.

Tool calibration required (interval)

Cause: MWR maximum number of tightenings before calibration is passed.

Solution: contact Atlas Copco Service Personnel to calibrate the MWR.

Tool calibration required (overloaded)

Cause: MWR is overloaded.

Solution: contact Atlas Copco Service Personnel to calibrate the MWR.

Tool hardware error

Cause: MWR hardware error.

Solution: contact Atlas Copco Service Personnel for assistance.

Replace mechanical parts

Cause: some MWR parts need to be checked and replaced.

Solution: contact Atlas Copco Service Personnel for assistance.

Reconfiguration required

Cause: an error occurred during MWR radio settings validation (only for Japanese channels).

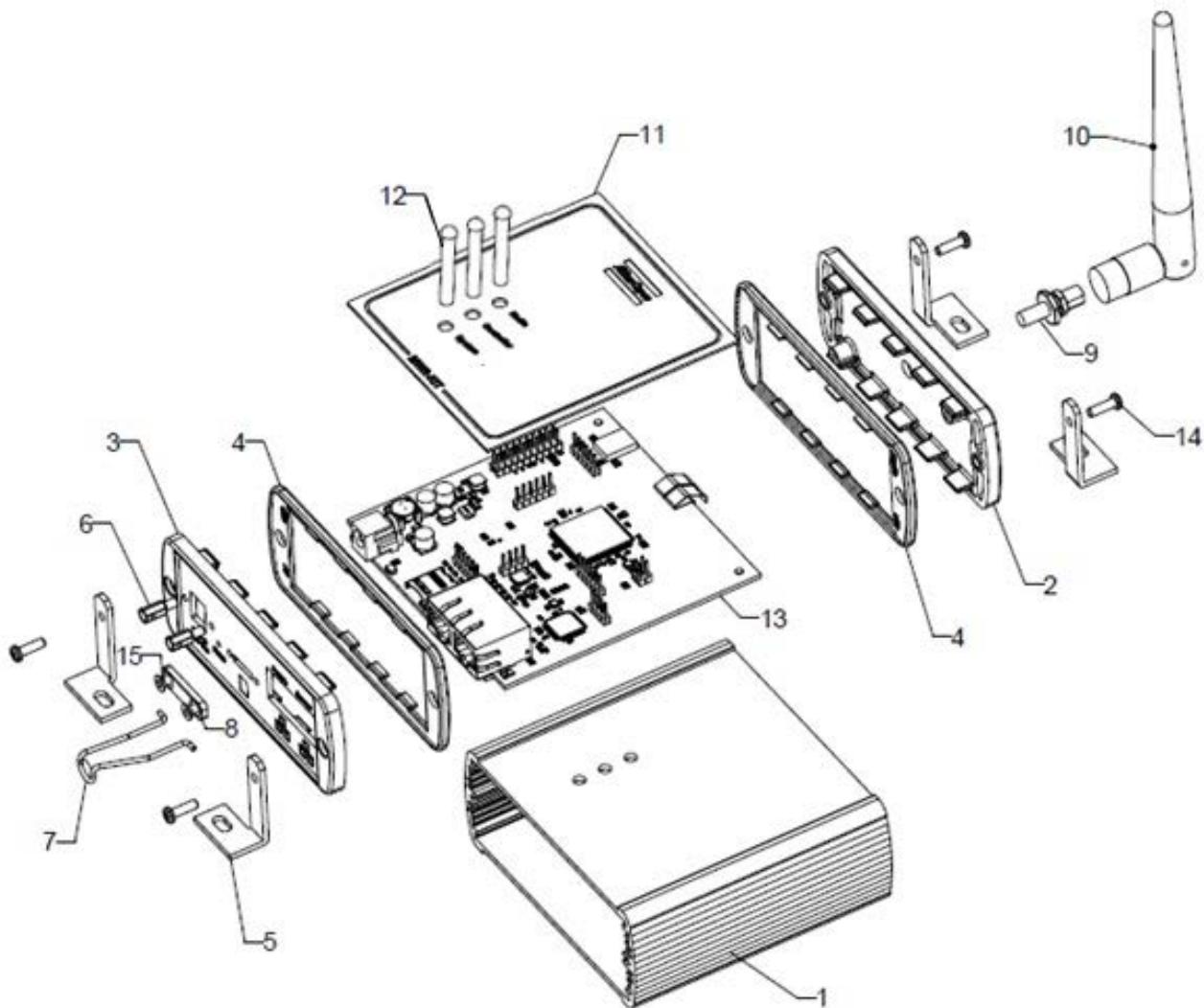
Solution: check the settings and retry.

Recycling

Environmental regulations

When a product has served its purpose it has to be recycled properly. Dismantle the product and recycle the components in accordance with local legislation.

Recycling information



PART	RECYCLE AS
1 Encloser profile	Aluminum
2 End cover	Aluminum
3 End cover	Aluminum
4 Gasket	TPE - Thermoplastic Elastomers
5 Wall bracket	Steel
6 Spacer spring	Stainless steel
7 Spring cable power	Stainless steel
8 SD-cover	POM - Polyoxymethylene

PART		RECYCLE AS
9	Cable	Brass
10	Antenna	WEEE - Waste of Electrical and Electronic Equipment
11	Label	Polycarbonate
12	Light guide panel	Polycarbonate
13	PCB	WEEE - Waste of Electrical and Electronic Equipment
14	Screw	Steel
15	Screw	Steel

Original instructions



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