

Operating and installation instructions

WAREMA Mobile System

WMS Hand-held transmitter



Keep for future use
Valid from 01 September 2014

General information



Fig. 1 WMS Hand-held transmitter

The WAREMA Mobile System (WMS) Hand-held transmitter is used for the remote control of WAREMA WMS receivers. The receivers send a confirmation of the received commands, and the hand-held transmitter indicates that it received the confirmation.

The WMS Hand-held transmitter supports 5 different product types. Ten channels are available per product type and up to 10 receivers can be learned in each channel.

To operate different products simultaneously and to recall self-defined states, up to 10 different scenes can be defined. A scene can be used to operate up to 200 receivers with a single command.

The comfort control functions can be switched on and off via the WMS Hand-held transmitter. The parameters of the control functions that are stored in the receiver can be displayed and changed.

When the WMS Hand-held transmitter operates a product, it indicates whether the previous operation of the product was by a control function. If a control function prevents operation of the product (e.g. a wind alarm), this is also displayed on the WMS Hand-held transmitter.

Intended use

This device was developed to control WAREMA Mobile System (WMS) receivers. The approval of the manufacturer must be obtained for uses outside of the purposes listed in these instructions.

Safety instructions



CAUTION

The hand-held transmitter is for indoor use only. It is not water-proof. Do not leave the transmitter outdoors.



CAUTION

Never activate buttons on your transmitter arbitrarily without visual contact to the sun shading product. Children may not play with this product - remote controls or transmitters may not get into the hands of children!

Carry out the following steps in the sequence given to ensure problem-free operation:

- Please read these instructions carefully
- Insert the batteries
- Learn the hand-held transmitter into the receivers
- Check that the system is functioning correctly

Commissioning

Films on commissioning can be found at:
<http://www.warema.de/inbetriebnahme-funksysteme>



We recommend commissioning using the WMS studio PC software.

- Insert the supplied batteries into the battery compartment as described in the "Maintenance" section. The device is now ready to operate.
- Learn the hand-held transmitter into the receivers. See the "Commissioning functions" section (When the receiver is delivered, it does not "know" any transmitter initially and first needs to learn to which transmitters it should respond. We refer to this process as "learning".)

Always follow the operating and installation instructions of the receivers.

NOTE

In addition, you can obtain the "WMS application brochure" with numerous practical examples of learning, making settings and WMS networks; the brochure is available free of charge from your specialist dealer. Alternatively, the brochure can be downloaded at: <http://www.warema.de> → Products → Controls → WAREMA Mobile System. The WAREMA Mobile System also enables a wide range of special functions.

Operating elements and displays

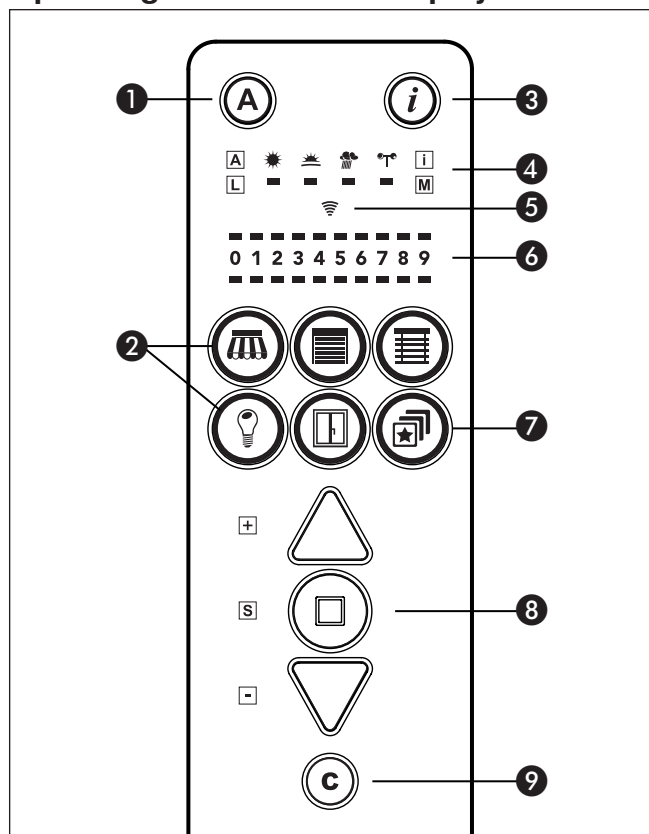


Fig. 2 Operating panel of the WMS Hand-held transmitter

Pos.	Fig.	Function
1	A	Control on/off button Switch on and off the control functions of the receivers that were learned.
2	Product buttons	Product buttons Select the product type or switch between product channels. (All product buttons that can be pressed light up. The currently selected product type flashes.) Awning Roller shutter External venetian blind Light Window
3	i	Info button Information displays on the currently selected product channel. Multiple display modes can be called up one by one. Every press on i changes to the next mode: 1. Assignment of channel and receivers (display only) 2. Sun control 3. Dawn/dusk control 4. Precipitation control 5. Wind monitoring 6. Leave the info mode Move commands cannot be sent while the info mode is active (i lights up). In the info mode, the hand-held transmitter switches off one minutes after the last press of a button.
4	Control function display	Control function display Display of the control functions for sun, dawn/dusk, precipitation and wind. If a control function was the reason for the last movement, the corresponding symbol lights up for 2s when you operate the product the next time. The LEDs below the symbols indicate the current state of the control functions.

Pos.	Fig.	Function
4	A L i	Display of special functions These fields are active if the corresponding function was activated by the press of a button. A Control mode L The learn mode is active i Info mode: Channels, parameters or control function information is displayed
5	Transmission LED	Transmission LED GREEN: The hand-held transmitter is transmitting. RED: The hand-held transmitter did not receive a response from the receiver YELLOW: Change the batteries
6	Numbers display	Numbers display The numbers display block indicates a variety of information, depending on the state of the hand-held transmitter. Upper row of LEDs: Scanned receivers, parameter values Numbers: Channel numbers, parameter levels Lower row of LEDs: Active channel
7	Scene button	Scene button Select stored scenes or store new scenes
8	UP/STOP/DOWN or +/- Save/- buttons	UP/STOP/DOWN or +/- Save/- buttons Send move or switch commands to the selected receiver. If the hand-held transmitter is in the info or learn mode, the buttons can be used to change or store settings (+ + S + - light up).
9	C	Comfort button Save and recall comfort positions and scenes

Operating elements on the back

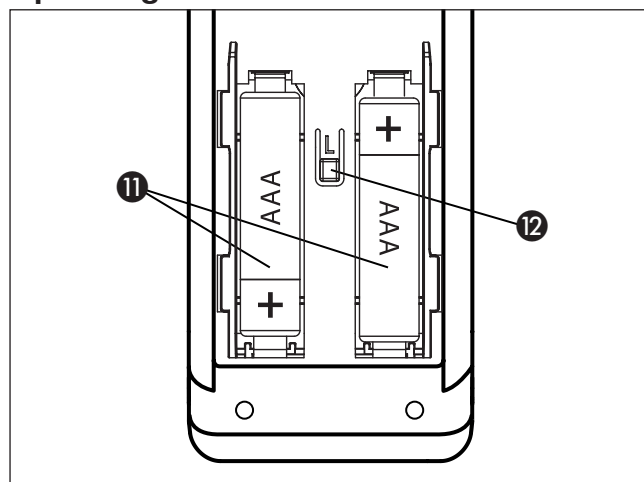


Fig. 3 Back of the WMS Hand-held transmitter

Pos.	Fig.	Function
11	Batteries	Batteries The hand-held transmitter requires two batteries of type AAA (IEC LR03, "Micro")
12	L	Learn button Activates or ends the learn mode of the hand-held transmitter (symbol L lights up in green)

Operation

Waking up

The hand-held transmitter is normally in the energy saving mode. The energy saving mode is activated 5 seconds after the last press of a button. All buttons on the front except for **A** or **i** wake up the transmitter as follows.

Button/ display	Action/result
	► Product or scene button: The first press of the button does not yet cause a function to be performed. The channel of this product type that was selected last is active again even after waking up.
	► UP/STOP/DOWN buttons: A move command is immediately sent to the product channel selected last.
	► Comfort button: The products in the channel selected last are moved to the comfort position. If a scene was selected last, it is recalled immediately.

NOTE The hand-held transmitter remains switched on for several minutes, depending on the function or mode.

Operating the products

Button/ display	Action/result
	■ Select the product type that you would like to operate. Only those product buttons light up for which products have been learned in.
E.g. 	► The selected product button flashes. ► In the number field, the channels on which products have been learned in light up (in the example on the left, 0 and 2). The LED below the currently selected channel lights up (in the example, channel 0).
	■ Press the flashing product button repeatedly until the LED below the desired channel lights up.
E.g. 	► The LED below the selected channel lights up (in the example, channel 2).
	■ Operate the selected product with the UP/STOP/DOWN buttons. The operating instructions of the respective receiver describe which operating options are available to you for the selected product (e.g. UP=ON, DOWN=OFF, STOP=switch).

Button/ display	Action/result
	► The transmission LED indicates the transmission process: Flashes GREEN: The hand-held transmitter is transmitting 2s GREEN: The receiver confirms the command 2s RED: The command was not confirmed (e.g. the receiver is outside of the transmission range) 2s GREEN + control symbol is red: The receiver confirms the command, but does not execute it because of the displayed control function (e.g. the awning is not extended because the wind alarm is active).

NOTE The WMS Hand-held transmitter remembers the product channel selected last. You can operate this product again directly using the UP/STOP/DOWN buttons or the comfort button without having to reselect it.

If the reason for the last movement was a sun, dawn/dusk, precipitation or wind alarm, the symbol lights up for 2s when the product is operated the next time.

Displaying/setting the control functions

If you retrofit your products with suitable WMS sensors in a WMS network, they can be extended and retracted automatically as a function of sunlight, dawn/dusk or precipitation. Detailed information can be found in the instructions of the WMS sensors.

The parameters of the comfort control functions can be displayed and changed on the hand-held transmitter.

NOTE Only those parameters are displayed that belong to the selected product type (e.g. there is no precipitation control for the "light" product type). The parameters of the wind safety function can be displayed but not changed.

Button/ display	Action/result
	■ Select the product type and channel that you wish to set.
E.g.	► The LED below the channel number lights up
	■ Press the info button briefly
	► lights up ► The upper row of LEDs shows how many receivers belong to the selected channel. One LED lights up in green for each receiver (one receiver in the example).
	■ Press the info button repeatedly until the desired control function lights up.
E.g.	► The LED below the control symbol shows the state of the control system. GREEN: Active RED: Inactive

Button/ display	Action/result
E.g. 	- The parameter value of the current control function is displayed in the upper row of LEDs (here, limit value 2 of the previously selected sun control). - RED: Value 0; the control function is off - GREEN: Values 1 to 9 - FLASHES: Multiple receivers with different values in the channel. The value of the first receiver is displayed.
You can now change this parameter value or switch to the next info mode using the  button:	
	Use the arrow keys ( +  light up) to change the parameter value.
E.g. 	The upper row of LEDs shows how the value changes (new value = 1)
	Press the  button
	- The  transmission LED lights up for 2 seconds - GREEN: The parameter value was stored in all receivers of the channel - RED: Not all receivers could be reached; press the  button again.
	Leave the info mode using the info button ( is no longer lit)

NOTE Move commands cannot be sent while the info mode is active ( lights up). In the info mode, the hand-held transmitter switches off one minute after the last press of a button.

If multiple receivers belong to a single channel, the set parameter value is written to all receivers of that channel.

Switching on/off the comfort control functions

Button/ display	Action/result
	Wake up the hand-held transmitter with any product button
	Press the control button.
	- The  and the control symbols light up. - The LEDs below the symbols indicate the type of switch command: - GREEN: Switch on the control functions - RED: Switch off the control functions
	- The  transmission LED lights up for 2 seconds - GREEN: The control functions were switched in all receivers - RED: Not all receivers could be reached; switch the control functions OFF and ON again (or ON and OFF).

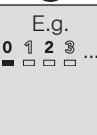
NOTE The hand-held transmitter always remembers the command last sent. When the control button is pressed again, the hand-held transmitter sends the opposite command (ON - OFF - ON -...).

Learning/recalling the comfort positions

A comfort position can be stored for every receiver in the network (e.g. awning half extended). The awning can be automatically moved to this comfort position at the press of a button.

Button/ display	Action/result
	Move any product to the position that is to be stored as the comfort position (see Operating the products).
	Hold down the comfort button for 5 seconds until the transmission LED lights up.
	- The transmission LED indicates the transmission process: 2s GREEN: The comfort position is stored 2s RED: The command was not confirmed (e.g. the receiver is outside of the transmission range); repeat the procedure

To recall a comfort position:

	Select any product channel.
E.g. 	- The selected product button flashes. - The LED below the currently selected channel lights up (in the example, channel 0).
	Briefly press the comfort button.
	- The transmission LED lights up - The comfort position for the selected product is restored automatically.

NOTE If a product is already in the comfort position or if a comfort position has not been stored, the selected product does not respond to pressing of the comfort button.

Advanced functions

Forming groups

In the following example, channel 1 and then channel 2 are assigned to the new channel 3. Channel 3 can then be used to jointly operate the products in channel 1 and channel 2.

Button/ display	Action/result
	Select the product type and the channel that is to belong to the group
E.g. 	The LED below the channel number lights up
	Press the learn button briefly
	 lights up in green and the previously selected channel number flashes.

Button/ display	Action/result
	■ Using the flashing product button, select the channel into which the previously selected product should be grouped. If you press the product button for more than 1s, the unused channels are activated as well, making it possible for you to select a new channel.
E.g.	► The channel number that you selected at the beginning continues to flash. The LED below the target channel lights up.
	■ Press the learn button briefly
 E.g.	► indicates whether the procedure was successful: RED: The channel assignment failed GREEN: The channel was assigned ► The product is now assigned to the new channel and can be operated via this channel.
You can now add additional products to this channel in the same manner:	
	■ Using the product button, select an additional channel of the same product type that is to belong to the group
E.g.	► The LED below the channel number lights up
	■ Press the learn button briefly
+	► lights up in green and the previously selected channel number flashes.
	■ Select the same target channel as before using the flashing product button.
E.g.	► The channel number that you selected at the beginning continues to flash. The LED below the target channel lights up.
	■ Press the learn button briefly
 E.g.	► indicates whether the procedure was successful: RED: The channel assignment failed GREEN: The channel was assigned ► Both products can now be operated jointly via the new channel.

NOTE Only channels that belong to the same product type can be grouped. Different product types can be jointly operated using scenes.

If a receiver is assigned to a channel or group a second time, it is deleted from the group again (learned in the first time, learn out the second time, etc.).

A channel cannot be assigned to itself. In this case, the learning procedure is aborted without an outcome; lights up red for 2s. (You can use this method to abort a learning procedure if you accidentally selected the wrong channel)

Deleting products from a channel

If a receiver is assigned to a channel or group a second time, it is deleted from the group again (learned in the first time, learn out the second time, etc.).

In the following example, a receiver is learned into channel 1 and channel 3. The receiver in channel 1 is then deleted from channel 3.

Button/ display	Action/result
	■ Select the product type or channel that you would like to delete from another channel or another group.
E.g.	► The LED below the channel number lights up
	■ Press the learn button briefly
+	► lights up in green and the previously selected channel number flashes.
	■ Using the flashing product button, select the channel from which the previously selected product should be deleted.
E.g.	► The channel number that you selected at the beginning continues to flash. The LED below the target channel lights up.
	■ Press the learn button briefly
E.g. E.g.	► The product has been deleted from the channel. ► If it was the only product stored in channel 3, channel 3 is now empty and is no longer displayed. ► If additional products are contained in channel 3, these can continue to be operated. Channel 3 is not cleared.

NOTE The same procedure can be applied to entire product groups. If the channel selected first contains products that do not exist in the target channel, all products in the first channel are copied into the target channel and none are deleted.

Forming scenes

Scenes can be used to jointly operate a large number of different products at the press of a button. The position or activation state of the products involved is stored and is then brought about again when the scene is recalled. A hand-held transmitter makes 10 scene channels available. Each scene channel can be assigned up to 200 receivers.

NOTE When forming a scene, the product channels are added to the scene one by one. A product channel can also contain a group of products. In this case, the entire group is added to the scene.

In the following example, a new scene (e.g. scene 1) is created and two different products are assigned.

Button/ display	Action/result
First, move all receivers that belong to the scene to the desired position (e.g. light on, external venetian blinds closed). Then proceed as follows:	

Button/ display	Action/result
	■ Select the first product type and channel that should belong to the scene
E.g. 0	► The LED below the channel number lights up
	■ Press the learn button briefly
+ 0	► lights up in green and the previously selected channel number flashes.
	■ Using the scene button, select the scene channel into which the previously selected product channel is to be integrated. If you press the scene button for more than 1s, the unused channels are activated as well, making it possible for you to select a new channel.
E.g. 0 1 2	► The LED below the scene channel lights up.
	■ Press the learn button briefly
E.g. 1 3	► The product channel is now assigned to the scene and can be operated via the scene.
You can now add additional products to this scene channel in the same manner:	
	■ Using a product button, select an additional channel that is to belong to the scene
E.g. 2	► The LED below the channel number lights up
	■ Press the learn button briefly
+ 2	► lights up in green and the previously selected channel number flashes.
	■ Using the scene button, select the same scene channel as before.
E.g. 2 3	► The LED below the scene channel lights up.
	■ Press the learn button briefly
After you have added all channels to the scene, you can learn in the current positions of the receivers involved into the scene.	
	■ Press the scene button to select the scene just defined.
E.g. 0 1 2	► The LED below the scene channel lights up.
	■ Press the comfort button for approx. 5 seconds.
	► The transmission LED lights up for 2 seconds GREEN: The position of all receivers is stored RED: Not all receivers could be reached; press the comfort button again.

NOTE The positions in the individual scenes are stored directly in the receivers. In this way, other transmitters that belong to the network can recall the same scene positions.

Calling up scenes

Button/ display	Action/result
	■ Press the scene button. The button only lights up if at least one scene was stored.
E.g. 0 1 2 3 ...	► The scene button flashes. ► In the number field, the channels on which a scene was stored light up (in the example on the left, 1 and 2). The LED below the currently selected channel lights up (in the example, channel 1).
	■ Press the scene button repeatedly until the LED below the desired channel lights up.
E.g. 0 1 2 3 ...	► The LED below the selected channel lights up (in the example, channel 2).
	■ Briefly press the comfort button to recall the selected scene.
	► The transmission LED indicates the transmission process: Flashes GREEN: The hand-held transmitter is transmitting 2s GREEN: The receiver confirms the command 2s RED: The command was not confirmed (e.g. the receiver is outside of the transmission range) 2s GREEN + LED below control symbol is red: The receiver confirms the command, but does not execute it because of the displayed control function (e.g. the awning is not extended because the wind alarm is active).

NOTE For scenes, the transmission process may take several seconds, depending on the number of receivers involved.

Redefining scenes

If you are no longer satisfied with the position of individual products in a scene, you can redefine the scene at the press of a few buttons.

NOTE When a scene is redefined, the states of all involved receivers are stored again. Recall the scene again before making changes to individual products. In this way, the states of the other products in the scene remain unchanged.

In the following example, the positions of products within the scene are changed and the scene is stored again.

Button/ display	Action/result
	■ Select the desired scene channel.
E.g. 0 1 2	► The LED below the scene channel lights up.
	■ Briefly press the comfort button to recall the currently stored state of the selected scene.
	■ Wait until all products involved in the scene reach their position.

Button/ display	Action/result
	■ Select the desired product and change its position using the UP/STOP/DOWN buttons.
	■ Using the scene button, select the scene channel again.
E.g.	▶ The LED below the scene channel lights up.
	■ Press the comfort button for approx. 5 seconds.
	▶ The transmission LED lights up for 2 seconds GREEN: The position of all receivers is stored RED: Not all receivers could be reached; press the comfort button again.

Deleting scenes

In the following example, a scene (e.g. scene 2) is deleted.

Button/ display	Action/result
	■ Select the scene channel that you would like to delete.
E.g.	▶ The LED below the selected channel lights up (in the example, channel 2).
	■ Press the scene button for at least 10 seconds.
	▶ The display changes to the normal product display. ▶ The scene is deleted.

NOTE After the last scene has been deleted, the scene button no longer lights up.

Commissioning functions

Learning in (scanning)

Before WMS receivers can be operated via a hand-held transmitter, they must be included as a component in the respective radio network. A hand-held transmitter can detect WMS receivers and sensors and add them to its network.



CAUTION

When learning in, it is important that you select the product type of the connected product. Selection of the wrong product type can lead to malfunctions and may result in damage to the connected product.

Button/ display	Action/result
	■ Wake up the hand-held transmitter with any product button
	■ Press the learn button for approx. 5 seconds
	▶ lights up in green; the transmission LED flashes. For several seconds, the hand-held transmitter scans the range for receivers.

Button/ display	Action/result
E.g.	▶ When the scanning procedure is completed, the located receivers are displayed in the upper row of LEDs (here, for example, 2 receivers). RED: New receiver GREEN: The receiver already belongs to the network Receivers that already belong to a different network are not located during scanning.
	■ Using the arrow keys, select the desired receiver. (You can use the button to check which receiver is currently selected. The product waves.)
E.g.	▶ The LED of the selected receiver flashes. For new receivers, all product buttons to which the receiver can be assigned flash.
	■ Select the product type and channel into which the receiver is to be learned
E.g.	▶ The LED of the selected receiver flashes in red. The selected product button flashes, and the current channel is displayed in the lower row of LEDs.
	■ Press the button
E.g.	▶ The LED of the selected receiver flashes in green. The receiver has been learned into the hand-held transmitter.
You can now add additional scanned products in the same manner:	
	■ Briefly press the learn button to leave the learn mode.

NOTE If the hand-held transmitter is still in its delivered state (no products have been learned in yet), lights up in red for 1 minute after the transmitter wakes up.

Once the product type has been selected, it can no longer be changed directly. To program a WMS plug receiver for another product type, the receiver must be deleted out of the network entirely and learned in again.

Deleting products from the network

You can completely delete a product from the network if you decide to remove the product or assign it to a different network.

In the following example, the second detected receiver is deleted from the network.

Button/ display	Action/result
	■ Wake up the hand-held transmitter with any product button
	■ Press the learn button for approx. 5 seconds
	▶ lights up in green; the transmission LED flashes. For several seconds, the hand-held transmitter scans the range for receivers.

Button/ display	Action/result
E.g.	When the scanning procedure is completed, the located receivers are displayed in the upper row of LEDs (here, for example, 2 receivers). RED: New receiver GREEN: The receiver belongs to the network
	Using the arrow keys, select the desired receiver. (You can use the button to check which receiver is currently selected. The product waves.)
E.g.	The LED of the selected receiver flashes in green.
	Press the and buttons simultaneously.
E.g.	- The LED of the selected receiver flashes in red. A running light runs through the lower row of LEDs. - The selected receiver waves.
	Press the learn button briefly
E.g.	- The LED of the selected receiver flashes in red. All product buttons to which the deleted receiver could be reassigned light up. - The receiver was deleted from the network.
You can now delete additional scanned products in the same manner:	
	Briefly press the learn button to leave the learn mode.

NOTE When you delete a receiver from the network, it can no longer be operated via other transmitters. It must be relearned into a network.

Maintenance and cleaning

Replacing the batteries

Replace the batteries if the transmission LED lights up yellow after the transmitter is activated. If the batteries are fully depleted, the hand-held transmitter can no longer be activated.

- In order to replace the batteries (type AAA, IEC LR03, "Micro"), open the battery compartment (*Fig. 3*) and insert the new batteries. Ensure the correct polarity: The plus (+) and minus (-) poles of the batteries must agree with the marks in the battery compartment.
- Only use new batteries of the same type and always replace both batteries. Use high quality batteries - inexpensive batteries can leak and damage the device. If the device is not used for a longer period, please remove the batteries. Do not use rechargeable batteries.

Cleaning

Clean the housing with a microfibre cloth or a soft damp cloth. Do not use detergents or cleaners, abrasive substances or steam cleaners.

Liability

Failure to comply with the product information in these instructions and use of the unit in a manner that contravenes its intended use and purpose may result in the manufacture refusing to honour warranty claims for product damage. In this case, liability for consequential harm to persons or damage to property will also be excluded. Follow the instructions in the operating instructions of your sun shading system. Liability is also excluded for damage to the sun shading system resulting from operation under icy conditions.

Disposal

After use, the device and the batteries must be disposed of according to legal regulations or brought to your local recycling centre.

Technical data

WAREMA Mobile System WMS Hand-held transmitter	Min.	Typ.	Max.	Unit
Supply				
Battery type	2 x AAA (IEC LR03, "Micro")			
Supply voltage	2.4	3.0	3.2	V DC
RF transceiver				
Transmission frequency	2.40		2.48	GHz
Transmission power			0	dBm
Reception sensitivity		-95		dBm
Range (environment without interference)		30		m
Enclosure				
Dimensions (L×W×H in mm)	200 × 50 × 20			
Degree of protection	IP30			
Safety class	III			
Miscellaneous				
Test standards	DIN EN 60950-1:2003-03 DIN EN 61000-6-2:2006-03 DIN EN 61000-6-3:2005-06 (Corr.2005-11) DIN EN 300328 V1.7.1.(2006-10)			
Automatic operation	Type 1			
Software class	A			
Location of use	Clean ambient conditions			
Conformity	 Viewable under www.warema.de			
Ambient conditions				
Operating temperature	-20	20	50	°C
Storage temperature	-25		70	°C
Rel. humidity (non-condensing)	10	40	85	%RH
Article numbers				
WMS Hand-held transmitter				1002 767
WMS Plug receiver and WMS Hand-held transmitter (not learned into each other)				1002 771
Wall holder/table stand for WMS Hand-held transmitter				1002 768
WAREMA Renkhoff SE Hans-Wilhelm-Renkhoff-Straße 2 D-97828 Marktheidenfeld				