

Industry Online Support

NEWS

Which Images are permitted for the Mobile Panel 277(F) IWLAN in Europe?

Mobile Panel 277(F) IWLAN

https://support.industry.siemens.com/cs/ww/en/view/109748593

Siemens Industry Online Support



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## Contents

1	Introduction		4
	1.1 1.2 1.2.1 1.2.2	Legislative Changes Article Numbers for Different Economic Areas Article Numbers (EU) Article Numbers (Non-EU)	4 4
2	2 Conformity		6
	2.1 2.1.1 2.1.2 2.2 2.2.1 2.2.2 2.3 2.3.1 2.3.2 2.3.3 2.3.3 2.3.4	Explanation of Terms Existing Plants vs. New Plants Change of RF Properties Images Images in Compliance with EN Standards Images for Service and Repair Purposes Case Examples Overview of Permissible Configurations Case 1: New Plant and Extension Case 2: Existing Plant and Extension Case 3: Existing Plant and Service/Repairs	6 6 6 7 7 8 9
3	Configu	ration1	1
	3.1 3.2 3.3	Commissioning	3
4	Further	Information about EU Devices with New Article Numbers 1	5
5	History		6

## 1 Introduction

## 1.1 Legislative Changes

#### Directives

In the EU the directives for devices with dual-band Wi-Fi (2.4 GHz and 5 GHz) have been changed. The R&TT Directive (Radio & Telecommunications Terminal Directive) has been replaced by the new RED (Radio Equipment Directive).

Figure 1-1

13.06.2	016 13.06	6.2017	
		1	
R&TT Directive	R&TT or RED Directive	RED Directive	7
X			

#### **European standards**

Both directives, the previous R&TT directive and the new RED, are guidelines for regulatory standards including the two below.

• ETSI EN 300 328 V1.9.1

"Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering the essential requirements of article 3.2 of the EU directive 2014/53/EU"

• ETSI EN 301 893 V1.8.1

"Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive"

#### Effects

Since the Mobile Panel 277(F) IWLAN communicates via WLAN, these devices are also subject to the abovementioned directives and EN standards.

This means that the Mobile Panel 277(F) IWLAN has to be operated with a device image that ensures conformity with the current wi-fi standard.

### 1.2 Article Numbers for Different Economic Areas

#### 1.2.1 Article Numbers (EU)

In connection with the directive change, which came into binding force on 30.11.2016, new article numbers (6AV6645-0E.02-0AX1) were introduced on 20.02.2017 for the Mobile Panels 277(F) IWLAN sold in the European Economic Area.

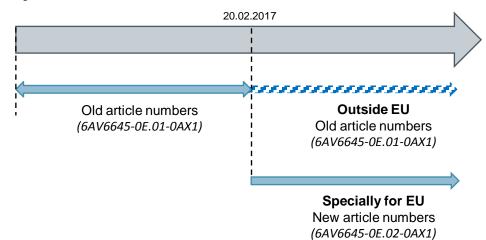
Further information on this is available in the Product Information "EU Order Numbers for Mobile Panel 277(F) IWLAN":

https://support.industry.siemens.com/cs/ww/en/view/109745667

**WARNING** Before the first project download with devices with new article numbers refer to <u>section 3.1</u>.

#### 1.2.2 Article Numbers (Non-EU)

All Mobile Panels 277(F) IWLAN that are not destined for final users in the European Economic Area retain the old article numbers (6AV6645-0E.01-0AX1). Figure 1-2



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## 2 Conformity

### 2.1 Explanation of Terms

#### 2.1.1 Existing Plants vs. New Plants

The following differentiation is made in accordance with the valid wi-fi standards and the corresponding conformity statements:

- Existing plants (marketed in the EU before 30.11.2016)
- New plants (marketed in the EU after 30.11.2016)

#### 2.1.2 Change of wireless characteristics

#### Example:

The wireless characteristics of the plant might change when the number of access points is changed and more Mobile Panels 277 (F) IWLAN are connected.

### 2.2 Images

**Note** An image is a data carrier image and in the case of SIMATIC panels includes the operating system and HMI Runtime version among other things.

Both WinCC flexible and WinCC (TIA Portal) images are available for the Mobile Panel 277(F) IWLAN. These are in the download "Images for Mobile Panel 277(F) IWLAN":

https://support.industry.siemens.com/cs/ww/en/view/109746331

Six images are available for downloading in this entry.

- 3 images in compliance with the EN standards (see section 2.2.1)
- 3 images for service and repair purposes (see section 2.2.2)

#### 2.2.1 Images in Compliance with EN Standards

The following images from the abovementioned download comply with ETSI EN 301 893 1.8.1/ETSI EN 300 328 1.9.1 1 and RED 2014/53/EU (Radio Equipment Directive):

- WinCC flexible image
  - "Mobile\_Panel\_277F\_W2\_V1\_0\_3\_8.zip"
- WinCC (TIA Portal) image
  - "Mobile\_Panel\_277\_W2\_V12\_0\_1\_10.zip"
  - "Mobile\_Panel\_277F\_W2\_V12\_0\_1\_10.zip"

WARNING These notes apply for new plants (marketed in the EU after 30.11.2016) and for extensions to existing plants that lead to a change of the RF properties.

#### 2.2.2 Images for Service and Repair Purposes

The following images from the abovementioned download are **designed** exclusively for service and repair purposes, otherwise sale in the EU is not permissible.

- WinCC flexible image
  - "Mobile\_Panel\_277F\_W2\_V1\_0\_3\_8\_\_service.zip"
- WinCC (TIA Portal) image
  - "Mobile\_Panel\_277\_W2\_V12\_0\_1\_8\_\_service.zip"
  - "Mobile\_Panel\_277F\_W2\_V12\_0\_1\_8\_\_service.zip"

**WARNING** This applies to existing systems (brought into distribution after November 30, 2016 in the EU), in as much as service and repair do not result in a change to the wireless characteristics.

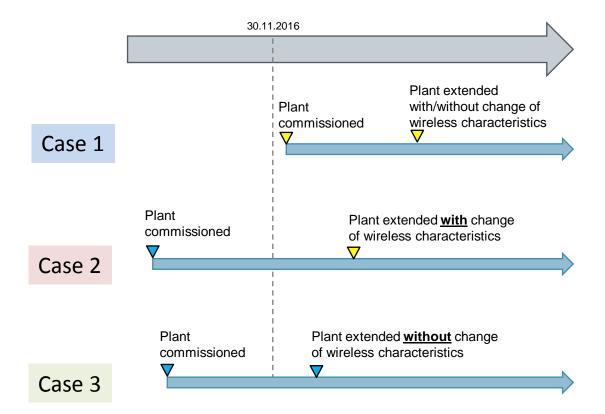
### 2.3 Case Examples

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#### 2.3.1 Overview of Permissible Configurations

Figure 2-1



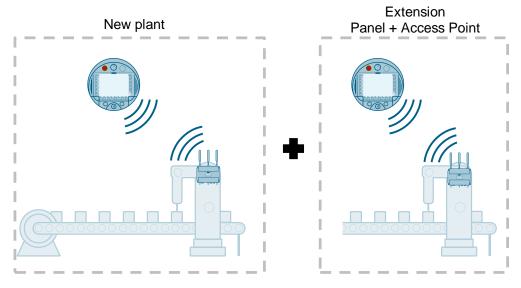


#### 2.3.2 Case 1: New Plant and Extension

#### Description

A plant was created <u>after</u> 30.11.2016 (new plant). The plant was extended with additional access points and Mobile Panels 277(F) IWLAN to accommodate the higher production figures.

#### Figure 2-2



#### Images

In this application case you have to use one of the images that ensure compliance with the EN standards (see section 2.2.1).

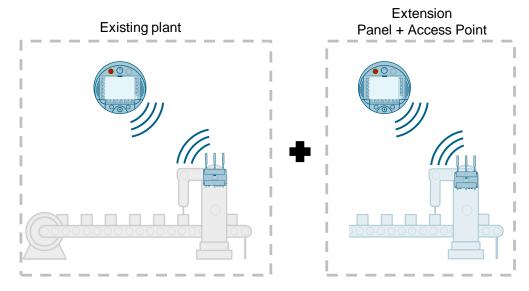
#### 2.3.3 Case 2: Existing Plant and Extension

#### Description

The plant was created and commissioned **<u>before</u>** 30.11.2016. This case deals with an existing plant.

After 30.11.2016 additional access points and Mobile Panels 277(F) IWLAN were added to the plant.

#### Figure 2-3



#### Images

The additional access points have changed the wireless characteristics.

In this case you must likewise operate the additional Mobile Panels 277(F) IWLAN with an image that ensures compliance with the EN standards (see <u>section 2.2.1</u>). The Mobile Panels 277(F) IWLAN that were commissioned before 30.11.2016 are not affected.

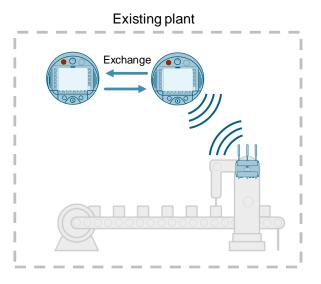
#### 2.3.4 Case 3: Existing Plant and Service/Repairs

#### Description

This last case also deals with an existing plant (commissioned <u>before</u> 30.11.2016). Previously only one Mobile Panel 277(F) IWLAN was in operation but after 30.11.2016 it broke down and had to be replaced with a panel with a new article number.

The number of access points remained the same.

Figure 2-4



#### Images

If a device is exchanged, this is a repair case so that you have to use an operator panel image that is designed for service and repair (see <u>section 2.2.2</u>).

WARNING	Using one of these operator panel images means that there is no conformity with
	standards ETSI EN 301 893 V1.8.1/ETSI EN 300 328 V1.9.1.

## 3 Configuration

## 3.1 Commissioning

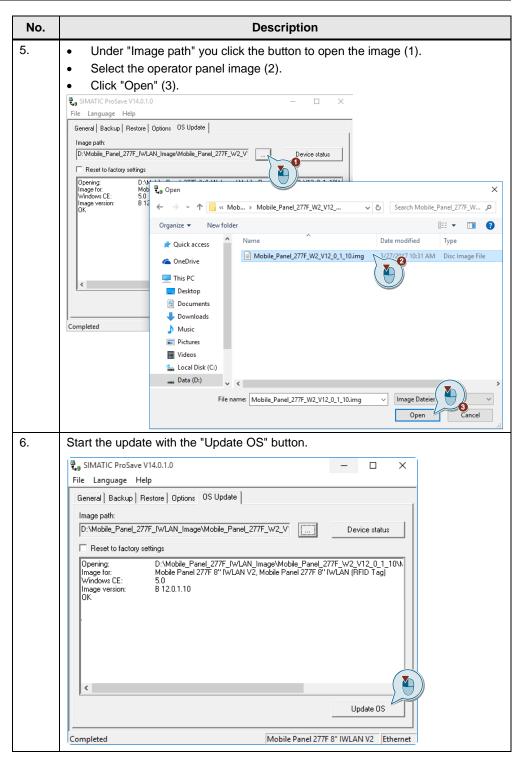
The table below describes what you should watch out for when commissioning a Mobile Panel 277(F) IWLAN with a new article number.

#### Requirements

Establish a LAN connection between the Mobile Panel 277(F) IWLAN and your configuration computer.

Table 3-1

No.	Description		
1.	Download the corresponding image as ZIP folder from the "Images for Mobile Panel 277(F) IWLAN" download: <u>https://support.industry.siemens.com/cs/ww/en/view/109746331</u> <b>Note</b> Please read carefully the linked product information in the entry.		
2.	Unpack the ZIP folder.		
3.	Open SIMATIC ProSave.		
4.	<ul> <li>Select the "Device type" (1).</li> <li>Select the "Connection" (2).</li> <li>Enter the IP address of the Mobile Panel (3).</li> <li>Open the "OS Update" tab (4).</li> <li>Image: SIMATIC ProSave V14.0.1.0 - Image: X</li> <li>File Language Help</li> <li>General Backup Restore Options OS Update</li> <li>Device type</li> <li>Mobile Panel 277F 8" IWLAN V2</li> <li>Connection</li> <li>Ethernet</li> <li>Image: X</li> <li< td=""></li<></ul>		
	Completed Mobile Panel 277F 8" IWLAN V2 Ethernet		

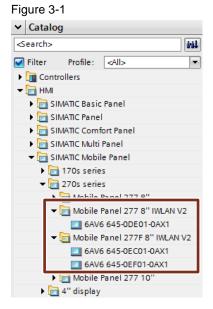


#### WARNING No communication

If by mistake you have transferred a non-released operator panel image to your device, then you can no longer establish the WLAN communication. In this case you transfer the released operator panel image to your operator panel via the Service interface (LAN) (see section 3.3).

## 3.2 Hardware Configuration

Only the "old" article numbers are available in the hardware catalog of the Engineering System (TIA Portal, for example).



If you want to implement a new Mobile Panel 277(F) IWLAN with a new article number in your plant, you still have to configure it with the old article number.

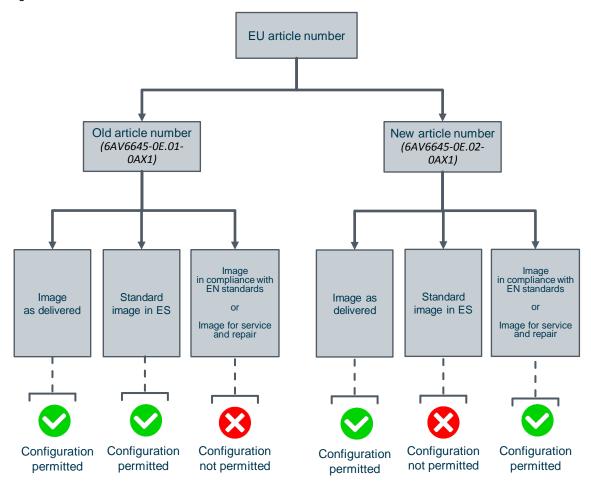
If you have commissioned the new Mobile Panel as in section 3.1, then you can transfer your project as usual to the operating panel.

**Note** Both the image for the service and repair case and the image that complies with the ETSI EN 301 893 1.8.1/ETSI EN 300 328 1.9.1 are only compatible with the new article numbers.

## 3.3 Device Image Configurations

The figure below gives you an overview of which device you can operate with which image.

Figure 3-2



## 4 Further Information about EU Devices with New Article Numbers

#### WLAN problems

If, when operating your Mobile Panel 277 (F) IWLAN in your local WLAN, you come across restrictions, you can enable "iPCF". You must enable this option both at the access point (via the web interface) and on the Mobile Panel.

**Note** With an image for service and repair, communication is possible only in the 5 GHz band.

#### Updating and monitoring times

Depending on the plant configuration, it might be necessary to change the "F monitoring time" and the "PROFINET updating time".

In the case of a plant with a Mobile Panel 277 (F) IWLAN, the times might be as follows instead of the standard values.

Table 4-1

Parameter	Standard values	Sample values for plant with Mobile Panel 277 (F) IWLAN
F monitoring time (F_WD time)	500 ms	1000 ms
PROFINET updating time	32-64 ms	64-128 ms

#### GSDML files

PROFINET diagnostics is currently not possible with the GSDML files (included with STEP 7 V5.x) for the Mobile Panel 277 (F) IWLAN.

Furthermore, there is no guarantee that the PROFISAFE functions work via GSDML files.

If you have any questions, please get in touch with our Technical Support:

https://support.industry.siemens.com/cs/ww/en/sc/2100

#### Updating the operating system

If the "Reset to Factory Settings" ("Booting") function does not work on your Mobile Panel 277 (F) IWLAN, do an image update via the "Update OS" function without the intermediary step of "Reset to Factory Settings".

# 5 History

Table 5-1

Version	Date	Change
V1.0	08/2017	First edition