



IWLAN access point, SCALANCE W1788-2 M12, 2 radios, 8 N-CON antenna port, iFeatures support via CLP, IEEE 802.11a/b/g/h/n/ac, 2.4/5 GHz, gross 1733 Mbit/s per radio, 2x M12 max. 1 Gbit/s, PoE, redundant 24 V DC, M12 A-coded IP65, -20..+70 °C, CLP slot, WPA2/802.11i/e, observe national approvals! CERT. ID: RAPAC-W2-M12-E4, includes: MPCIE-R1-ABGNAC-U4 Scope of delivery: Manuals on DVD, German/English, M12 sealing caps, for operation outside of USA/Israel

### Transfer rate

Transfer rate	
<ul style="list-style-type: none"> <li>with WLAN / maximum</li> <li>for Industrial Ethernet</li> </ul>	1733 Mbit/s 10, 100, 1000 Mbit/s
Transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	10 Mbit/s 1000 Mbit/s

### Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum / Note	2
Number of electrical/optical connections / for gigabit Ethernet / maximum	2
Number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> <li>for power supply</li> <li>for redundant voltage supply</li> </ul>	2 1 1
Type of electrical connection	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	M12 interface (8-pole, X-coded), PoE

<ul style="list-style-type: none"> <li>• for power supply</li> </ul>	M12 interface (4-pole, A-coded)
design of the removable storage	
<ul style="list-style-type: none"> <li>• CLP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CLP iFeatures</li> </ul>	Yes

### Interfaces / wireless

Number of radio cards / permanently installed	2
Transmission mode / for multiple input multiple output (MIMO)	4x4
Number of spatial streams	4
Number of electrical connections / for external antenna(s)	8
Type of electrical connection / for external antenna(s)	N-Connect (socket)
Product feature / external antenna can be mounted directly on device	Yes

### Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> <li>• from M12 Power Connector (A-coded) for redundant power supply</li> </ul>	16.8 V
Supply voltage / 2	
<ul style="list-style-type: none"> <li>• from M12 Power Connector (A-coded) for redundant power supply</li> </ul>	31.2 V
Supply voltage	
<ul style="list-style-type: none"> <li>• from Power-over-Ethernet acc. to IEEE802.3at for type 2</li> </ul>	48 V
Consumed current	
<ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> </ul>	0.7 A
<ul style="list-style-type: none"> <li>• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical</li> </ul>	0.385 A
Power loss [W]	
<ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> </ul>	16.8 W
<ul style="list-style-type: none"> <li>• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical</li> </ul>	18.5 W

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-20 ... +70 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +85 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	90 %
Protection class IP	IP65

### Design, dimensions and weights

Width	258 mm
Height	258 mm
Depth	80 mm
Width / of the enclosure / without antenna	258 mm
Height / of the enclosure / without antenna	258 mm
Depth / of the enclosure / without antenna	80 mm
Net weight	2.7 kg
Mounting type	
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

### Radio frequencies

Operating frequency	
• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz; depending on the country approvals
• for WLAN in 5 GHz frequency band	4.9 ... 5.8 GHz; depending on the country approvals

### Product features, product functions, product components / general

Product function / Access Point Mode	Yes
Product function / Client Mode	Yes
Number of SSIDs	16
Product function	
• iPCF Access Point	No
• iPCF client	No
• iPCF-MC Access Point	No
• iPCF-MC client	No
Product function / iREF	No
Product function / iPRP	Yes

### Product functions / management, configuration, engineering

Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	Yes
• configuration with STEP 7 in the TIA Portal	Yes
• operation with IWLAN controller	No
• forced roaming with IWLAN	Yes
• forced roaming on IP down with IWLAN	Yes
• forced roaming on link down with IWLAN	No
• WDS	Yes
Protocol / is supported	

• Address Resolution Protocol (ARP)	Yes
• ICMP	Yes
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• DCP	Yes
• LLDP	Yes
<b>Identification &amp; maintenance function</b>	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

### Product functions / Diagnostics

<b>Product function</b>	
• PROFINET IO diagnosis	Yes
<b>Protocol / is supported</b>	
• SNMP v1	Yes
• SNMP v2c	Yes
• SNMP v3	Yes

### Product functions / VLAN

<b>Product function</b>	
• function VLAN with IWLAN	Yes

### Product functions / DHCP

<b>Product function</b>	
• DHCP client	Yes
• DHCP server	Yes
• DHCP Option 82	Yes

### Product functions / redundancy

<b>Protocol / is supported</b>	
• STP/RSTP	Yes
• MSTP	Yes
• RSTP	Yes

### Product functions / Security

<b>Product function</b>	
• ACL - MAC-based	No
• Management security, ACL-IP based	Yes
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	No
• access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes

<ul style="list-style-type: none"> <li>• TKIP/AES</li> </ul>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>• SSH</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RADIUS</li> </ul>	Yes

### Product functions / time

Protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SIMATIC time synchronization (SIMATIC Time)</li> </ul>	Yes

### Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> <li>• for FM</li> </ul>	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
Certificate of suitability	
<ul style="list-style-type: none"> <li>• EC declaration of conformity</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• C-Tick</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• E1 approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEC 61850-3</li> </ul>	No
<ul style="list-style-type: none"> <li>• Power-over-Ethernet according to IEEE802.3at for type 2</li> </ul>	Yes
Standard for wireless communication	
<ul style="list-style-type: none"> <li>• IEEE 802.11a</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11b</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11e</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11g</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11h</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11i</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11n</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11ac</li> </ul>	Yes
Wireless approval	You will find the current list of countries at: <a href="http://www.siemens.de/funkzulassungen">www.siemens.de/funkzulassungen</a>

### accessories

accessories	pre-assembled holder for attachment to a DIN rail
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### Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: TIA Selection Tool</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
<ul style="list-style-type: none"> <li>• to the website: IWLAN</li> </ul>	<a href="http://www.siemens.com/iwlan">http://www.siemens.com/iwlan</a>
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
<ul style="list-style-type: none"> <li>• to website: Information and Download Center</li> </ul>	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>

- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

## Security information

### Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

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