

**Product-type designation**

**SCALANCE W788-1 RJ45**



IWLAN ACCESS POINT,  
 SCALANCE W788-1 RJ45,  
 FOR USE OUTSIDE OF USA, 1 RADIO,  
 3 R-SMA ANT.CONNECT.,  
 IEEE 802.11A/B/G/H/N, 2.4/5GHZ,  
 BRUTTO 450 MBIT/S PRO RADIO,  
 1 X RJ45 (MAX. 1 GBIT/S), POE, 2X24VDC,  
 IP30 (-20-+60 DGR C), POE,  
 WPA2/802.11I/E, SIGNALLING CONTACT,  
 PLEASE NOTE NATIONAL APPROVALS! SCOPE OF  
 SUPPLY: MANUALS ON CD ROM GERMAN/ENGLISH,  
 2 X TERMINAL BLOCK

**Transmission rate**

Transfer rate

- with W-LAN / maximum 450 Mbit/s
- with Industrial Ethernet 10 ... 1000 Mbit/s

**Interfaces**

Number of electrical connections

- for network components and terminal equipment 1
- for power supply 1
- for redundant power supply 1

Design of the electrical connection

- for network components and terminal equipment RJ45 socket
- for power supply 4-pole screw terminal, PoE

Version of the swap medium

- C-PLUG Yes
- KEY-PLUG Yes

Number of radio cards / permanently installed

1

Type of transmission / for multiple input multiple output (MIMO)

3x3

Number of spatial streams

3

Number of electrical connections / for external antenna(s)

3

Design of the electrical connection / for external antenna(s)

R-SMA (socket)

Product property / external antenna can be mounted directly on device	Yes
Number of digital inputs	1
Number of digital outputs	1
Design of electrical connection / at the digital inputs/outputs	4-pole screw terminal
Signal range	
• at digital input	24 V DC, safety extra-low voltage
• at the digital output	24 V DC /1 A
<b>Supply voltage, current consumption, power loss</b>	
Type of / supply voltage	DC
Supply voltage	
• 1 / from terminal block	19.2 V
• 2 / from terminal block	28.8 V
• from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	48 V
• from Power-over-Ethernet according IEEE802.3at for type 2	50 V
Current consumed	
• at 24 V / with DC / typical	0.45 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.22 A
Active power loss	
• at 24V / for DC / typical	10.7 W
<b>Permitted ambient conditions</b>	
Ambient temperature	
• during operating	-20 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operating / maximum	90 %
Protection class IP	IP30
<b>Design, dimensions and weight</b>	
Width / of enclosure / without antenna	200 mm
Height / of enclosure / without antenna	158 mm
Depth / of enclosure / without antenna	79 mm
Net weight	1.7 kg
Mounting type	
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• wall mounting	Yes
<b>Wireless frequencies</b>	
Radio frequency	

• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz
• for WLAN in 5 GHz frequency band	4.9 ... 5.8 GHz
<b>Product properties, functions, components / general</b>	
Product function	
• Access Point Mode	Yes
• Client Mode	Yes
Number of SSIDs	8
Product function	
• Dual Client	No
• iPCF Access Point	Yes
• note	Only in combination with the 'KEY-PLUG W780 iFeatures'
• iPCF client	Yes
• note	Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
• iPCF-MC Access Point	No
• iPCF-MC client	No
• note	In combination only with 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
Number of iPCF-capable radio modules	1
Product function / iREF	Yes
• note	In combination only with 'KEY-PLUG W780 iFeatures'
Number of iREF-capable radio modules	1
<b>Product functions / management, configuration</b>	
Number of manageable IP addresses / in client	8
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	No
• configuration with STEP 7 in the TIA Portal	No
• operation with IWLAN controller	No
• operation with Enterasys WLAN controller	No
• forced roaming with IWLAN	Yes
• WDS	Yes
Protocol / is supported	
• Address Resolution Protocol (ARP)	Yes
• ICMP	Yes
• Telnet	Yes
• HTTP	Yes

• HTTPS	Yes
• TFTP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher level designation/location designation	Yes
<b>Product functions / Diagnosis</b>	
Product function	
• PROFINET IO diagnosis	No
• Link Check	No
• connection monitoring IP-Alive	No
• localization via Aeroscout	No
• SysLog	Yes
<b>Product functions / VLAN</b>	
Product function / function VLAN with IWLAN	Yes
<b>Product functions / DHCP</b>	
Product function / DHCP client	Yes
Product function / in Client Mode / DHCP server via LAN	No
<b>Product functions / Redundancy</b>	
Protocol / is supported / STP/RSTP	Yes
<b>Product functions / Security</b>	
Product function	
• Management security, ACL-IP based	Yes
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	No
• access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes
• TKIP/AES	Yes
Protocol / is supported / SSH	Yes
<b>Product functions / Time</b>	
Protocol / is supported	
• SNTP	Yes
• SIMATIC Time	Yes
<b>Standards, specifications, approvals</b>	
Standard	

<ul style="list-style-type: none"> <li>• for EMC / from FM</li>   <li>• for hazardous zone</li>   <li>• for safety / of CSA and UL</li> </ul>	<p>FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4</p> <p>EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X</p> <p>UL 60950-1 CSA C22.2 No. 60950-1</p>
<b>Verification of suitability</b>	
<ul style="list-style-type: none"> <li>• CE mark</li> <li>• EC declaration of conformity</li> <li>• C-Tick</li> <li>• CCC</li> <li>• Railway application in accordance with EN 50155</li> <li>• fire protection in accordance with EN 45545-2</li> <li>• E1 approval</li> <li>• NEMA TS2</li> <li>• IEC 61375</li> <li>• IEC 61850-3</li> <li>• NEMA4X</li> <li>• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af</li> <li>• Power-over-Ethernet according to IEEE802.3at for type 2</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p>
<b>Standard for wireless communication</b>	
<ul style="list-style-type: none"> <li>• IEEE 802.11a</li> <li>• IEEE 802.11b</li> <li>• IEEE 802.11e</li> <li>• IEEE 802.11g</li> <li>• IEEE 802.11h</li> <li>• IEEE 802.11i</li> <li>• IEEE 802.11n</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Wireless approval</b>	
<p>You will find the current list of countries at:  <a href="http://www.siemens.de/funkzulassungen">www.siemens.de/funkzulassungen</a></p>	
<b>Marine classification association</b>	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• Bureau Veritas (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>

<b>Accessories</b>	
Accessories	24 V DC screw terminal and screw terminal for digital input and output included in the scope of delivery

letzte Änderung:

Jul 21, 2014