



IWLAN access point, SCALANCE W1788-1 M12, 1 radio, 4 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-W1-M12-E4, includes: MPCIE-R1-ABGNAC-U4 Scope of delivery: Manuals on DVD, German/English, M12 sealing caps, for operation outside of USA/Israel

Transmission rate

Transfer rate	
• with WLAN / maximum	1733 Mbit/s
• for Industrial Ethernet	10, 100, 1000 Mbit/s
Transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	1000 Mbit/s

Interfaces

Number of electrical/optical connections / for gigabit Ethernet / maximum	2
Number of electrical connections	
• for network components or terminal equipment	2
• for power supply	1
• for redundant voltage supply	1
Type of electrical connection	
• for network components or terminal equipment	M12 interface (8-pole, X-coded), PoE
• for power supply	M12 interface (4-pole, A-coded)
design of the removable storage	

- C-PLUG
- KEY-PLUG
- CLP

No
No
Yes

Interfaces / wireless

Number of radio cards / permanently installed	1
Transmission mode / for multiple input multiple output (MIMO)	4x4
Number of spatial streams	4
Number of electrical connections / for external antenna(s)	4
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 • from M12 Power Connector (A-coded) for redundant power supply	16.8 V
Supply voltage / 2 • from M12 Power Connector (A-coded) for redundant power supply	31.2 V
Supply voltage • from Power-over-Ethernet acc. to IEEE802.3at for type 2	48 V
Consumed current • at DC / at 24 V / typical • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	0.375 A 0.21 A
Power loss [W] • at DC / at 24 V / typical • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	10.1 W 9 W

Permitted ambient conditions

Ambient temperature • during operation • during storage • during transport	-20 ... +70 °C -40 ... +85 °C -40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	90 %
Protection class IP	IP65

Design, dimensions and weight

Width	258 mm
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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

Wireless frequencies

Operating 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

Product properties, functions, components / general

Product function / Access Point Mode	Yes
Product function / Client Mode	No
Number of SSIDs	8
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	No

Product functions / management, configuration

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 • Telnet • HTTP • HTTPS • TFTP • DCP • LLDP	Yes Yes Yes Yes Yes Yes Yes
Identification & maintenance function • I&M0 - device-specific information • I&M1 – higher-level designation/location designation	Yes Yes
Product functions / Diagnosis	
Product function • PROFINET IO diagnosis	Yes
Protocol / is supported • SNMP v1 • SNMP v2c • SNMP v3	Yes Yes Yes
Product functions / VLAN	
Product function • function VLAN with IWLAN	Yes
Product functions / DHCP	
Product function • DHCP client • DHCP server • DHCP Option 82	Yes Yes Yes
Product functions / Redundancy	
Protocol / is supported • STP/RSTP • MSTP • RSTP	Yes Yes Yes
Product functions / Security	
Product function • ACL - MAC-based • Management security, ACL-IP based • IEEE 802.1x (radius) • NAT/NAPT • access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES	No Yes Yes No Yes Yes Yes

Protocol / is supported	
• SSH	Yes
• RADIUS	Yes

Product functions / Time

Protocol / is supported	
• NTP	Yes
• SNTP	Yes
• SIMATIC time synchronization (SIMATIC Time)	Yes

Standards, specifications, approvals

Certificate of suitability	
• EC declaration of conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• IEC 61850-3	No
• NEMA4X	No
• Power-over-Ethernet according to IEEE802.3at for type 2	Yes
Standard for wireless communication	
• IEEE 802.11a	Yes
• IEEE 802.11b	Yes
• IEEE 802.11e	Yes
• IEEE 802.11g	Yes
• IEEE 802.11h	Yes
• IEEE 802.11i	Yes
• IEEE 802.11n	Yes
• IEEE 802.11ac	Yes
Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen

Further Information / Internet Links

Internet-Link	
• to website: TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to the website: IWLAN	http://www.siemens.com/iwlan
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

Security information

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