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Product type designation	**SCALANCE W786-2RR**
	IWLAN Access Point SCALANCE W786-2RR, for operation outside USA IEEE 802.11b/g/a/h, Industrial Wireless LAN with rapid roaming (IWLAN RR) 2.4/5 GHz, up to 54 Mbit/s, WPA2/802.11I/11E, Observe national approvals, 48 V DC, IP65 (-40-+70 °C) 4x ext. antenna connections 2 radio interfaces, PoE, RJ45 (Twisted Pair) socket Scope of delivery: mounting hardware, Only available as spare part

Transfer rate

Transfer rate	
• with WLAN / maximum	54 Mbit/s
• for Industrial Ethernet	10, 100 Mbit/s
Transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	100 Mbit/s
Transfer rate / Note	Due to the simultaneous use of several radio channels, a transmission rate of 108 Mbit/s is possible (turbo mode)

Interfaces

Number of electrical connections	
• for network components or terminal equipment	1
• for power supply	1
• for redundant voltage supply	1
Type of electrical connection	
• for network components or terminal equipment	RJ45 socket
• for power supply	2-pin connector (48 V DC) or optionally available power supply adapter (4-pin 12 to 24 V DC or 3-pin 100 to 240 V AC)

design of the removable storage	
• C-PLUG	Yes
• KEY-PLUG	No

Interfaces / wireless

Number of radio cards / permanently installed	2
Number of electrical connections / for external antenna(s)	4
Type of electrical connection / for external antenna(s)	R-SMA (socket)
Product feature / external antenna can be mounted directly on device	No

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1	
• from terminal block	48 V
Supply voltage	
• from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af	48 V
• from optional integrable power supply	
— at AC	100 ... 240 V
— at DC	12 ... 24 V
Consumed current	
• at DC / at 24 V / typical	0.34 A
• at DC / at 48 V / typical	0.17 A
• at AC / at 230 V / typical	0.04 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.34 A
Power loss [W]	
• at DC / at 24 V / typical	8 W
• at DC / at 48 V / typical	8 W
• at AC / at 230 V / typical	8 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	8 W

Ambient conditions

Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	100 %
Ambient condition / for operation	When using the 100 - 240 V AC power supply, an operating temperature of -40 °C to +60 °C is permissible
Protection class IP	IP65

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Design, dimensions and weights

Width / of the enclosure / without antenna	251 mm
Height / of the enclosure / without antenna	251 mm
Depth / of the enclosure / without antenna	72 mm
Net weight	2.24 kg
Mounting type	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required
• S7-1500 rail mounting	No
• wall mounting	Yes

Radio 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 features, product functions, product components / general

Product function / Access Point Mode	Yes
Product function / Client Mode	Yes
Number of SSIDs	16
Product function	
• Dual Client	Yes
• iHOP	Yes
• iPCF Access Point	Yes
• iPCF client	Yes
• iPCF-MC Access Point	Yes
• iPCF-MC client	Yes
Number of iPCF-capable radio modules	1

Product functions / management, configuration, engineering

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	Yes
• configuration with STEP 7 in the TIA Portal	Yes
• operation with IWLAN controller	No
• operation with Enterasys WLAN controller	No
• iQoS	Yes
• 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
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnostics

Product function	
• PROFINET IO diagnosis	Yes
• Link Check	Yes
• connection monitoring IP-Alive	Yes
• localization via Aeroscout	Yes
• SysLog	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes

Product functions / VLAN

Product function	
• function VLAN with IWLAN	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP server	Yes

Product functions / redundancy

Protocol / is supported	
• STP/RSTP	Yes

Product functions / Security

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

• TKIP/AES	Yes
Protocol / is supported	
• SSH	Yes

Product functions / time

Protocol / is supported	
• SNTP	Yes
• SIMATIC time synchronization (SIMATIC Time)	No

Standards, specifications, approvals

Standard	
• for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
Certificate of suitability	
• EC declaration of conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• E1 approval	Yes
• Railway application in accordance with EN 50155	No
• NEMA4X	Yes
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	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	No
• IEEE 802.11ac	No
Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	Yes
• Lloyds Register of Shipping (LRS)	Yes

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• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	No

accessories

accessories	48 V DC terminal block included in scope of delivery

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

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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