

### Product-type designation

### SCALANCE W744-1PRO



IWLAN ETHERNET CLIENT MODULE SCALANCE W744-1PRO,  
FOR USE OUTSIDE OF USA 1 RADIO INTERFACE,  
IEEE 802.11B/G/A/H,  
INDUSTRIAL WIRELESS LAN (IWLAN),  
2.4/5GHZ, UP TO 54 MBIT/S,  
WPA2/802.11i/11E,  
NOTE NATIONAL APPROVALS, POE,  
IP65 (-20-+60 DGR C), EN50155,  
SCOPE OF SUPPLY:2X ANT 795-4MR,  
IP67 HYBRID-CONNECT. PLUG,  
MOUNTING MATERIAL,  
MANUALS ON CD ROM GERMAN/ENGLISH

### Transmission rate

#### Transfer rate

- with W-LAN / maximum
- with Industrial Ethernet
- note

54 Mbit/s

10 ... 100 Mbit/s

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 and terminal equipment
- for power supply
- for redundant power supply

1

1

1

#### Design of the electrical connection

- for network components and terminal equipment
- for power supply

Hybrid socket, RJ45 integrated

M12 interface (4-pole, A-coded), hybrid socket, PoE

#### design of the removable storage / C-PLUG

Yes

### Interfaces / wireless

#### Number of radio cards / permanently installed

1

#### Number of electrical connections / for external antenna(s)

2

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

R-SMA (socket)

|                                                                                          |                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product property / external antenna can be mounted directly on device                    | Yes                                                                                                                                                                                                                                                   |
| <b>Supply voltage, current consumption, power loss</b>                                   |                                                                                                                                                                                                                                                       |
| Type of / supply voltage                                                                 | DC                                                                                                                                                                                                                                                    |
| Supply voltage                                                                           |                                                                                                                                                                                                                                                       |
| • 1 / from M12 Power Connector (A-coded) for redundant power supply                      | 24 V                                                                                                                                                                                                                                                  |
| • 2 / from M12 Power Connector (A-coded) for redundant power supply                      | 48 V                                                                                                                                                                                                                                                  |
| • from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af              | 48 V                                                                                                                                                                                                                                                  |
| Current consumed                                                                         |                                                                                                                                                                                                                                                       |
| • at 24 V / with DC / typical                                                            | 0.25 A                                                                                                                                                                                                                                                |
| • at 48 V / with DC / typical                                                            | 0.13 A                                                                                                                                                                                                                                                |
| • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical | 0.13 A                                                                                                                                                                                                                                                |
| Active power loss                                                                        |                                                                                                                                                                                                                                                       |
| • at 24V / for DC / typical                                                              | 7 W                                                                                                                                                                                                                                                   |
| • at 48 V / with DC / typical                                                            | 7 W                                                                                                                                                                                                                                                   |
| • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical | 7 W                                                                                                                                                                                                                                                   |
| <b>Permitted ambient conditions</b>                                                      |                                                                                                                                                                                                                                                       |
| Ambient temperature                                                                      |                                                                                                                                                                                                                                                       |
| • during operating                                                                       | -20 ... +60 °C                                                                                                                                                                                                                                        |
| • during storage                                                                         | -40 ... +70 °C                                                                                                                                                                                                                                        |
| • during transport                                                                       | -40 ... +70 °C                                                                                                                                                                                                                                        |
| Relative humidity / at 25 °C / without condensation / during operating / maximum         | 100 %                                                                                                                                                                                                                                                 |
| Protection class IP                                                                      | IP65                                                                                                                                                                                                                                                  |
| Ambient condition / for (standard) operation mode                                        | When used under hazardous conditions (Zone 2), the SCALANCE W788-xPRO/RR or W74x-1PRO/RR product must be installed in an enclosure. To comply with EN 50021, this enclosure must meet the requirements of at least IP 54 in compliance with EN 60529. |
| <b>Design, dimensions and weight</b>                                                     |                                                                                                                                                                                                                                                       |
| Width / of enclosure / without antenna                                                   | 125 mm                                                                                                                                                                                                                                                |
| Height / of enclosure / without antenna                                                  | 88 mm                                                                                                                                                                                                                                                 |
| Depth / of enclosure / without antenna                                                   | 108 mm                                                                                                                                                                                                                                                |
| Net weight                                                                               | 1.05 kg                                                                                                                                                                                                                                               |
| Mounting type                                                                            |                                                                                                                                                                                                                                                       |
| • S7-300 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                                        | No                |
| • Client Mode                                              | Yes               |
| Product function                                           |                   |
| • Dual Client                                              | No                |
| • iHOP                                                     | No                |
| • iPCF client                                              | No                |
| • iPCF-MC client                                           | No                |
| Number of iPCF-capable radio modules                       | 0                 |
| <b>Product functions / management, configuration</b>       |                   |
| Number of manageable IP addresses / in client              | 1                 |
| 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                |
| • iQoS                                                     | No                |
| • forced roaming with IWLAN                                | No                |
| • WDS                                                      | No                |
| 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                                                     | No                |
| 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            | No                                                                                                                                     |
| <b>Product functions / DHCP</b>                        |                                                                                                                                        |
| Product function                                       |                                                                                                                                        |
| • DHCP client                                          | Yes                                                                                                                                    |
| • in Client Mode / DHCP server via LAN                 | No                                                                                                                                     |
| <b>Product functions / Security</b>                    |                                                                                                                                        |
| Product function                                       |                                                                                                                                        |
| • ACL - MAC-based                                      | No                                                                                                                                     |
| • Management security, ACL-IP based                    | No                                                                                                                                     |
| • 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                                         | No                                                                                                                                     |
| <b>Standards, specifications, approvals</b>            |                                                                                                                                        |
| Standard                                               |                                                                                                                                        |
| • for EMC / from 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 / of CSA and UL                           | UL 60950-1 CSA C22.2 No. 60950-1                                                                                                       |
| • for hazardous area / of CSA and UL                   | ISA 12.12.01-2000, CSA C22.2 No. 213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC, T4 / CL. 1, Zone 2, AEx nC IIC, T4 |
| Verification of suitability                            |                                                                                                                                        |
| • CE mark                                              | Yes                                                                                                                                    |
| • EC declaration of conformity                         | Yes                                                                                                                                    |

|                                                                        |                                                                                                                                       |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| • C-Tick                                                               | Yes                                                                                                                                   |
| • Railway application in accordance with EN 50155                      | Yes                                                                                                                                   |
| • E1 approval                                                          | Yes                                                                                                                                   |
| • NEMA4X                                                               | No                                                                                                                                    |
| • 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                                                                                                                                    |
| Wireless approval                                                      | You will find the current list of countries at:<br><a href="http://www.siemens.de/funkzulassungen">www.siemens.de/funkzulassungen</a> |
| 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                                                                                                                                   |
| • Nippon Kaiji Kyokai (NK)                                             | Yes                                                                                                                                   |
| • Polski Rejestr Statkow (PRS)                                         | Yes                                                                                                                                   |
| <b>Accessories</b>                                                     |                                                                                                                                       |
| Accessories                                                            | 2 antennas, hybrid connector included in scope of delivery                                                                            |
| <b>letzte Änderung:</b>                                                | Aug 6, 2014                                                                                                                           |