

### Product type designation

### SCALANCE W774-1 RJ45

IWLAN ACCESS POINT, SCALANCE W774-1 RJ45, FOR USE IN USA ONLY, 1 RADIO, 2 R-SMA ANT. CONNECT., IFEATUES ONLY WITHT KEY-PLUG, IEEE 802.11A/B/G/H/N, 2.4/5GHZ, BRUTTO DATA RATE 300 MBIT/S, 2 X RJ45 (MAX. 100 MBIT/S), POE INTEGRATED 2-PORT-SWITCH, 2X24V DC, IP20, PLUG-IN SLOT PLEASE NOTE NATIONAL APPROVALS. (CERT ID: MSN-W1-RJ-E2) SCOPE OF SUPPLY: MANUALS ON CD ROM, GERMAN / ENGLISH, 1 X TERMINAL BLOCK



### Transmission rate

#### Transfer rate

- |                           |                                              |
|---------------------------|----------------------------------------------|
| • with WLAN / maximum     | 300 Mbit/s                                   |
| • for Industrial Ethernet | 10 Mbit/s, 100 Mbit/s, 10 Mbit/s, 100 Mbit/s |

### Interfaces

#### 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 | RJ45 socket                |
| • for power supply                             | 4-pole screw terminal, PoE |

#### design of the removable storage

- |            |     |
|------------|-----|
| • C-PLUG   | Yes |
| • KEY-PLUG | Yes |

### Interfaces / wireless

#### Number of radio cards / permanently installed

|   |
|---|
| 1 |
|---|

|                                                                      |                |
|----------------------------------------------------------------------|----------------|
| Transmission mode / for multiple input multiple output (MIMO)        | 2x2            |
| Number of spatial streams                                            | 2              |
| Number of electrical connections / for external antenna(s)           | 2              |
| Type of electrical connection / for external antenna(s)              | R-SMA (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 terminal block</li> </ul>                                                                                                       | 19.2 V            |
| Supply voltage / 2 <ul style="list-style-type: none"> <li>• from terminal block</li> </ul>                                                                                                       | 28.8 V            |
| Supply voltage <ul style="list-style-type: none"> <li>• from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af</li> </ul>                                                       | 48 V              |
| Consumed current <ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> <li>• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul> | 0.25 A<br>0.125 A |
| Power loss [W] <ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> <li>• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>   | 6 W<br>6 W        |

#### Permitted ambient conditions

|                                                                                                                                                |                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul> | -20 ... +60 °C<br>-40 ... +85 °C<br>-40 ... +85 °C                                                                                                                                                                                                  |
| Relative humidity / at 25 °C / without condensation / during operation / maximum                                                               | 97 %                                                                                                                                                                                                                                                |
| Ambient condition / for operation                                                                                                              | When used under hazardous conditions (Zone 2), the SCALANCE W774-1 RJ45 or W734-1 RJ45 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. |
| Protection class IP                                                                                                                            | IP30                                                                                                                                                                                                                                                |

#### Design, dimensions and weight

|                                             |        |
|---------------------------------------------|--------|
| Width                                       | 26 mm  |
| Height                                      | 156 mm |
| Depth                                       | 127 mm |
| Width / of the enclosure / without antenna  | 26 mm  |
| Height / of the enclosure / without antenna | 147 mm |

|                                            |                                    |
|--------------------------------------------|------------------------------------|
| Depth / of the enclosure / without antenna | 127 mm                             |
| Net weight                                 | 0.52 kg                            |
| Mounting type                              | wall mounting only if flat mounted |
| • S7-300 rail mounting                     | Yes                                |
| • S7-1500 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       | Yes                                                         |
| Number of SSIDs                      | 4                                                           |
| Product function                     |                                                             |
| • Dual Client                        | No                                                          |
| • iPCF Access Point                  | Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' |
| • iPCF client                        | Yes; Only in combination with the 'KEY-PLUG W740 iFeatures' |
| • iPCF-MC Access Point               | No                                                          |
| • iPCF-MC client                     | Yes; Only in combination with the 'KEY-PLUG W740 iFeatures' |
| Number of iPCF-capable radio modules | 1                                                           |
| Product function / iREF              | No                                                          |
| Number of iREF-capable radio modules | 0                                                           |

#### Product functions / management, configuration

|                                               |     |
|-----------------------------------------------|-----|
| 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 |
| • forced roaming 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 |
| Identification & maintenance function                  |     |
| • I&M0 - device-specific information                   | Yes |
| • I&M1 – higher-level designation/location designation | Yes |

#### Product functions / Diagnosis

|                                  |     |
|----------------------------------|-----|
| Product function                 |     |
| • PROFINET IO diagnosis          | Yes |
| • Link Check                     | No  |
| • connection monitoring IP-Alive | No  |
| • localization via Aeroscout     | No  |
| • 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 |
| • in Client Mode / DHCP server via LAN | No  |

#### Product functions / Redundancy

|                         |     |
|-------------------------|-----|
| Protocol / is supported |     |
| • STP/RSTP              | Yes |

#### Product functions / Security

|                                              |     |
|----------------------------------------------|-----|
| Product function                             |     |
| • 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 |
| • TKIP/AES                                   | Yes |
| Protocol / is supported                      |     |
| • SSH                                        | Yes |

#### Product functions / Time

|                         |  |
|-------------------------|--|
| Protocol / is supported |  |
|-------------------------|--|

- SNTP
- SIMATIC Time

Yes

Yes

## 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                                                                                                      |
| • for hazardous zone / from CSA and UL                                 | ANSI/ISA 12.12.01-2013, CAN/CSA C22.2 No.213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC                            |
| Certificate of suitability                                             |                                                                                                                                       |
| • EC declaration of conformity                                         | Yes                                                                                                                                   |
| • CE marking                                                           | Yes                                                                                                                                   |
| • C-Tick                                                               | Yes                                                                                                                                   |
| • CCC                                                                  | No                                                                                                                                    |
| • E1 approval                                                          | No                                                                                                                                    |
| • Railway application in accordance with EN 50155                      | No                                                                                                                                    |
| • Fire protection in accordance with EN 45545-2                        | No                                                                                                                                    |
| • NEMA TS2                                                             | No                                                                                                                                    |
| • IEC 61375                                                            | No                                                                                                                                    |
| • IEC 61850-3                                                          | No                                                                                                                                    |
| • NEMA4X                                                               | No                                                                                                                                    |
| • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af | Yes                                                                                                                                   |
| • 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                                                                                                                                   |
| 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)                        | No                                                                                                                                    |
| • Bureau Veritas (BV)                                                  | No                                                                                                                                    |
| • Det Norske Veritas (DNV)                                             | No                                                                                                                                    |

- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

No  
No  
No  
No

## Accessories

accessories

24 V DC screw terminal included in scope of delivery

## Further Information / Internet Links

Internet-Link

- to website: TIA Selection Tool
- to the website: IWLAN
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/tia-selection-tool>  
<http://www.siemens.com/iwlan>  
<https://mall.industry.siemens.com>  
<http://www.siemens.com/industry/infocenter>  
<http://automation.siemens.com/bilddb>  
<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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