

Product-type designation **SCALANCE X414-3E**

SCALANCE X414-3E, MODULAR IE SWITCH,
 2 X 10/100/1000MBIT/S AND 12 X 10/100MBIT/S RJ45
 PORTS,
 1 X GIGABIT AND 2 X 100 MBIT MEDIA MODULE
 SLOTS,
 EXTENDER INTERFACE,
 INTEGRATED REDUNDANCY MANAGER,
 OFFICE FEATURES (RSTP, VLAN,..) NETWORK
 MANAGEMENT,
 C-PLUG INCLUDED IN THE SCOPE OF SUPPLY



Transmission rate

Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s
Transfer rate / 3	1000 Mbit/s

Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum	26
Number of electrical connections	
• for network components and terminal equipment	14
• with extender modules	8
• for operator console	1
• for signaling contact	1
• for media module	3
• for power supply	1
• for redundant power supply	1
Design of electrical connection	
• for network components and terminal equipment	RJ45 port (2 x 1GE, 12 x FE)
• with extender modules	RJ45 port via EM495-8
• for operator console	RS232 port
• for signaling contact	4-pole terminal block

<ul style="list-style-type: none"> • for power supply 	4-pole terminal block
Number of optical interfaces / for optical waveguide	
<ul style="list-style-type: none"> • at 100 Mbit/s 	4
<ul style="list-style-type: none"> • at 1000 Mbit/s 	2
<ul style="list-style-type: none"> • with extender modules 	8
Design of optical interface / for optical waveguide	
<ul style="list-style-type: none"> • at 100 Mbit/s 	BFOC or SC ports via media modules MM491-2, MM491-2LD, MM491-2LH+
<ul style="list-style-type: none"> • at 1000 Mbit/s 	SC ports via media modules MM492-2, MM492-2LD, MM492-2LH, MM492-2LH+
<ul style="list-style-type: none"> • with extender modules 	BFOC or SC ports via media modules MM491-2, MM491-2LD, MM491-2LH+, MM492-2, MM492-2LD, MM492-2LH, MM492-2LH+
Number of extender expansion interfaces	1
design of the extender extension interface	EM495-8 or EM496-4
design of the removable storage / C-PLUG	Yes

Signal-Inputs/outputs

Operating voltage / of signaling contacts / at DC / rated value	24 V
Operating current / of signaling contacts / at DC / maximum	0.1 A
Number of digital inputs	2
Number of electrical connections / for digital input signals	2
Design of electrical connection / for digital input signals	5-pole terminal block

Supply voltage, current consumption, power loss

Type of / supply voltage	DC
Supply voltage / external	24 V
<ul style="list-style-type: none"> • minimum 	20.4 V
<ul style="list-style-type: none"> • maximum 	28.8 V
Product component / fusing at power supply input	Yes
Type of fusing / at input for supply voltage	F 3,15 A / 250 V
Consumed current / maximum	2 A
Active power loss	
<ul style="list-style-type: none"> • at 24 V / for DC 	15 W
<ul style="list-style-type: none"> • maximum 	48 W

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operating 	-40 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +80 °C
Relative humidity / at 25 °C / without condensation / during operating / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight

Design	Modular
Width	344 mm
Height	145 mm
Depth	117 mm
Net weight	3.07 kg
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	No
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	No

Product properties, functions, components / general

Cascading in the case of a redundant ring / at reconfiguration time of $\leq 0.3\text{ s}$	50
Cascading in cases of star structuring	Any (depending only on signal propagation time)
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	Yes
• RMON	Yes
• Port mirroring	Yes
• CoS	Yes
• PROFINET IO diagnosis	Yes
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• IGMP (snooping/querier)	Yes
• GMRP	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	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes
Product functions / VLAN	
Product function	
• VLAN - port based	Yes
• VLAN dynamic	Yes
Number of VLANs / maximum	64
Number of VLANs - dynamic / maximum	64
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
Product functions / Routing	
Product function	
• static IP routing	Yes
• dynamic IP routing	Yes
Protocol / is supported	
• RIPv2	Yes
• OSPFv2	Yes
• VRRP	Yes
Product functions / Redundancy	
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
• Standby redundancy	Yes
• High Speed Redundancy Protocol (HRP)	Yes
• Media Redundancy Protocol (MRP)	Yes
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes

• redundancy procedure MSTP	No
• Passive listening	Yes
Protocol / is supported	
• RSTP big network support	Yes
• LACP	Yes
Product functions / Security	
Product function	
• ACL - MAC-based	Yes
• ACL - port/MAC-based	Yes
• IEEE 802.1x (radius)	Yes
• Broadcast/Multicast/Unicast Limiter	Yes
• broadcast blocking	Yes
Protocol / is supported / SSH	Yes
Product functions / Time	
Product function / SICLOCK support	Yes
Protocol / is supported	
• NTP	No
• SNTP	Yes
Standards, specifications, approvals	
Standard	
• for EMC / from FM	FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
• for emitted interference	EN 61000-6-4:2001 (Class A)
• for interference immunity	EN 61000-6-2:2001
Verification of suitability	EN 61000-6-2:2001, EN 61000-6-4:2001
• CE mark	Yes
• C-Tick	Yes
• KC approval	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Germanische Lloyd (GL)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
Further Information / Internet Links	
Internet-Link	
• to website: Industry Mall	http://www.siemens.com/industrial-controls/mall
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog

- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

letzte Änderung:

<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<http://support.automation.siemens.com>

Aug 6, 2014