



Figure similar

The RUGGEDCOM i803 is a compact, fully managed Ethernet switches designed to operate reliably in harsh industrial environments. managed or unmanaged; regular or extended temperature; fiber optical or copper interfaces; Fast or Gigabit Ethernet; 128-bit Encryption; Ethernet Ports: 4x 10/100Tx + 1x 100FX + 2x 1000LX or 2x 100FX

<b>product type designation</b>	<b>RUGGEDCOM i803</b>
<b>transfer rate</b>	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
number of ports / maximum	8; Number of ports depending on configuration
<b>interfaces / other</b>	
number of electrical connections	
• for operator console	1
• for management purposes	0
type of electrical connection	
• for operator console	RS232
• for signaling contact	3-pole terminal block, screwable
• for power supply	5-pole terminal block, screwable
<b>signal inputs/outputs</b>	
relay design	Optional Form-C contact relay (SPDT) as alarm relay
type of relay output	Changeover contact (CO)
operational current / of the signaling contacts	
• at DC / at 30 V / maximum	2 A
<b>supply voltage, current consumption, power loss</b>	
<b>type of voltage / 1 / of the supply voltage</b>	DC
• supply voltage / 1 / rated value	24 V
• power loss [W] / 1 / rated value	9 W
• consumed current / 1 / at rated supply voltage / maximum	0.4 A
• supply voltage / 1 / rated value	9 ... 32 V
• type of electrical connection / 1 / for power supply	5-pole terminal block, can be screwed
<b>ambient conditions</b>	
ambient temperature	
• during operation	-20 ... +60 °C
• note	Optional temperature range -40 °C ... +85 °C
operating condition / fanless operation	Yes
protection class IP	IP4X
<b>design, dimensions and weights</b>	
design	compact
width	56.5 mm
height	134.5 mm
depth	99.5 mm
net weight	1 kg
product feature / conformal coating	optional
material / of the enclosure	Cast Aluminum Enclosure
fastening method	

<ul style="list-style-type: none"> <li>• 35 mm top hat DIN rail mounting</li> </ul>	Yes
<b>product features, product functions, product components / general</b>	
storage capacity	
<ul style="list-style-type: none"> <li>• of the MAC-address table</li> </ul>	16 kbyte
<ul style="list-style-type: none"> <li>• of message buffer / maximum</li> </ul>	128 kbyte
switch latency period	4 µs
transfer rate / of the switch	7.6 Gbit/s
number of priority channels	4
product feature	
<ul style="list-style-type: none"> <li>• no head-off-line-blocking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Store &amp; Forward switching method</li> </ul>	Yes
<b>product functions / management, configuration, engineering</b>	
product function	
<ul style="list-style-type: none"> <li>• CLI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• web-based management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MIB support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RMON</li> </ul>	Yes
product function / switch-managed	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• Telnet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTPS</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TFTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNMP v1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNMP v2</li> </ul>	No
<ul style="list-style-type: none"> <li>• SNMP v2c</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNMP v3</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IGMP (snooping/querier)</li> </ul>	Yes
number of groups / at IGMP	256
product function	
<ul style="list-style-type: none"> <li>• for MIB support / by BRIDGE-MIB</li> </ul>	RFC4188
<ul style="list-style-type: none"> <li>• for MIB support / by IF-MIB</li> </ul>	RFC2863
<ul style="list-style-type: none"> <li>• for MIB support / by RMON-MIB</li> </ul>	RFC2819
<ul style="list-style-type: none"> <li>• for MIB support / by RSTP-MIB</li> </ul>	RFC4318
<ul style="list-style-type: none"> <li>• for MIB support / by SNMPv2-MIB</li> </ul>	RFC1907
<ul style="list-style-type: none"> <li>• for MIB support / by SNMPv2-SMI</li> </ul>	RFC2578
<ul style="list-style-type: none"> <li>• for MIB support / by SNMPv2-TC</li> </ul>	RFC2579
<ul style="list-style-type: none"> <li>• for MIB support / by TCP-MIB</li> </ul>	RFC2012
<ul style="list-style-type: none"> <li>• for MIB support / by UDP-MIB</li> </ul>	RFC2013
<b>product functions / VLAN</b>	
product function	
<ul style="list-style-type: none"> <li>• VLAN - port based</li> </ul>	Yes
number of VLANs / maximum	255
VLAN identification number	1 ... 4094
protocol / is supported / GVRP	Yes
<b>product functions / DHCP</b>	
product function	
<ul style="list-style-type: none"> <li>• DHCP client</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP Option 82</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP Option 66</li> </ul>	No
<ul style="list-style-type: none"> <li>• DHCP Option 67</li> </ul>	No
<b>product functions / routing</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>• PPP</li> </ul>	Yes
<b>product functions / redundancy</b>	
product function	
<ul style="list-style-type: none"> <li>• redundancy procedure STP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• redundancy procedure RSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• redundancy procedure MSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• eRSTP</li> </ul>	Yes

protocol / is supported	
• STP	Yes
• RSTP	Yes
• MSTP	Yes
<b>product functions / security</b>	
product function	
• IEEE 802.1x (radius)	Yes
• RADIUS client	Yes
protocol / is supported	
• RADIUS	Yes
• TACACS+	Yes
• SSL	Yes
key length	
• with SSL	56 bit
• with RSA	1024 bit
product function / port-rate-limiting	Yes
adjustable port-rate-limitation	128 kbit/s ... 8 Mbit/s
<b>product functions / time</b>	
product function	
• SNTP client	Yes
• SNTP server	Yes
protocol / is supported	
• SNTP	Yes
<b>standards, specifications, approvals</b>	
standard	
• for safety / from CSA and UL	CSA C22.2 No. 60950-1-03, UL 60950-1, UL 508
reference code	
• according to IEC 81346-2	KF
• according to IEC 81346-2:2019	KFE
<b>standards, specifications, approvals / CE</b>	
certificate of suitability / CE marking	Yes
standard	
• for EMC	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
<b>standards, specifications, approvals / hazardous environments</b>	
standard / for hazardous zone	ATEX Zone 2 (IEC/EN 60079-15)
<b>standards, specifications, approvals / other</b>	
laser protection class	Complies with 21 CFR chapter 1, subchapter J
<b>standards, specifications, approvals / product conformity</b>	
product conformity	
• according to IEEE 802.3-10BaseT	Yes
• according to IEEE 802.3u-100BaseTX	Yes
• according to IEEE 802.3u-100BaseFX	Yes
• according to IEEE 802.3ab-1000BaseT	Yes
• according to IEEE 802.3z-1000BaseLX	Yes
• according to IEEE 802.3ad-Link Aggregation	Yes
• according to IEEE 802.3x-Flow Control	Yes
• according to IEEE 802.1d-MAC Bridges	Yes
• according to IEEE 802.1d-STP	Yes
• according to IEEE 802.1p-class of service	Yes
• according to IEEE 802.1Q-VLAN tagging	Yes
• according to IEEE 802.1Q-2005 (formerly IEEE 802.1s)	Yes
MSTP	
• according to IEEE 802.1w-RRST	Yes
• according to IEEE 802.1x-port based Network Access Control	Yes
• RFC768-UDP	Yes
• RFC783-TFTP	Yes
• RFC791-IP	Yes
• RFC792-ICMP	Yes
• RFC793-TCP	Yes
• RFC826-ARP	Yes

- RFC854-Telnet
- RFC894-IP over Ethernet
- RFC1112-IGMPv1
- RFC1519-CIDR
- RFC1541-DHCP (client)
- RFC2030-SNTP
- RFC2068-HTTP
- RFC2236-IGMPv2
- RFC2284-EAP
- RFC2475-Differentiated Service
- RFC2865-RADIUS
- RFC3414-SNMPv3-USM
- RFC3415-SNMPv3-VACM

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes

**further information / internet links**

internet link

- to website: Selection guide for cables and connectors
- to website: Industry Mall/RUGGEDCOM selector
- to website: Industrial communication
- to website: Siemens RUGGEDCOM
- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support





<https://support.industry.siemens.com/cs/ww/de/view/109766358>  
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<https://sieportal.siemens.com/>  
<https://www.automation.siemens.com/bilddb>  
<https://www.siemens.com/cax>  
<https://support.industry.siemens.com>

**security information**

security information

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**Approvals / Certificates**

General Product Approval	For use in hazardous locations	Test Certificates	other
			
<a href="#">Manufacturer Declaration</a>			<a href="#">inspection certificate</a>

Dangerous Good	Environment
<a href="#">Dangerous Goods Information</a>	

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