6GK6008-1AS20-0...   RUGGEDCOM I801

Technical Data

Product-type designation	RUGGEDCOM i801
Product description	**Compact Managed Industrial Ethernet Switch with 1 Fiber Optics, 128-bit Encryption**
	THE RUGGEDCOM I801 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: 8X 10/100TX + 1X 1000LX OR 1X 10/100/1000TX

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	9
• remark	8 x 10/100TX + 1 x 1000LX
number of electrical/optical connections / for gigabit Ethernet / maximum	1
Number of electrical connections	
• for network components and terminal equipment	
• maximum	8
• for gigabit Ethernet / maximum	1
• for operator console	1
• for management purposes	0
Design of electrical connection	
• for operator console	RS232
• for signaling contact	3-pole terminal block, screwable
• for power supply	5-pole terminal block, screwable
Number of optical connections / for network	1

components or terminal equipment / maximum	
Range / at the optical interface / depending on the optical fiber used	2…20 km
operating distance / of optical interface / depending of used optical fiber / at gigabit	0.5…10 km
Signal-Inputs/outputs	
Relay design	Optional Form-C contact relay (SP CO) as alarm relay
type of the relay output	Change-over (NO/NC)
Operating current / of signaling contacts	
• at DC	
• at 30 V / maximum	1 A
Supply voltage, current consumption, power loss	
Type of voltage / 1 / of the supply voltage	DC
Supply voltage / 1	
• rated value	24 V
• rated value	10…32 V
Current consumed / 1 / at rated value of supply voltage / max.	0.4 A
Power loss	
• maximum	9 W
Permitted ambient conditions	
Ambient temperature	
• during operating	-20…+60 °C
Coating	Conformal Coating optional
operating condition / fanless operation	Yes
Protection class IP	IP40
Design, dimensions and weight	
Design	compact
Width	51 mm (2 in)
Height	114 mm (4.5 in)
Depth	89 mm (3.5 in)
Net weight	1 kg
Material / of the enclosure	Heavy Duty Cast Aluminum Enclosure HazLoc Rated
Type of mounting	
• 35 mm DIN rail mounting	Yes
Product properties, functions, components / general	
memory capacity	
• of MAC-address table	16 Kibyte
• of message buffer / maximum	1 Mibyte
switch-latency period	8 µs
transfer rate / of the switch	5.2 Gbit/s
number of priority channels	4
product characteristic	
• no head-off-line-blocking	Yes

• Switching-Methode Store & Forward	Yes
Product functions / management, configuration	
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• RMON	Yes
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	No
• TFTP	Yes
• IGMP (snooping/querier)	Yes
number of groups / at IGMP	256
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	No
• SNMP v2c	Yes
• SNMP v3	Yes
product function / for MIB-support	
• by BRIDGE-MIB	RFC1493
• by IF-MIB	RFC2863
• by RMON-MIB	RFC2819
• by RSTP-MIB	draft-ietf-bridge-bridgemib-smiv2-03-RSTP-MIB
• by SNMPv2-MIB	RFC1907
• by SNMPv2-SMI	RFC2578
• by SNMPv2-TC	RFC2579
• by TCP-MIB	RFC2012
• by UDP-MIB	RFC2013
Product functions / VLAN	
Product function	
• VLAN - port based	Yes
Number of VLANs / maximum	255
VLAN-Identification number	1…4094
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	No
• DHCP Option 67	No
Product functions / Routing	
protocol / is supported	

• PPP	Yes
Product functions / Redundancy	
Product function	
• redundancy procedure STP	Yes
• RSTP redundancy protocol	Yes
• redundancy procedure MSTP	Yes
• eRSTP	Yes
Protocol / is supported	
• STP	Yes
• RSTP	Yes
• MSTP	Yes
Product functions / Security	
product function	
• IEEE 802.1x (radius)	Yes
• RADIUS client	Yes
protocol / is supported	
• RADIUS	Yes
• TACACS+	Yes
• SSL	Yes
key length	
• at SSL	56 bit
• at RSA	1024 bit
product function / port-rate-limiting	Yes
adjustable port-rate-limitation	128 kbit/s…8 Mbit/s
Product functions / Time	
product function	
• SNTP-client	Yes
• SNTP-server	Yes
Protocol / is supported	
• SNTP	Yes
Standards, specifications, approvals	
Standard	
• for EMC	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
• for hazardous zone	ATEX Zone 2 (IEC/EN 60079-15)
• for safety / of CSA and UL	cUL508 (UL508/CSA C22, EN61010-1)
Laser protection class	Complies with 21 CFR Chapter1, Subchapter J
Verification of suitability	
• CE mark	Yes
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 802.3x-Flow Control	Yes
• according to IEEE 802.3ab-1000BaseT	Yes

• according to IEEE 802.3ad-Link Aggregation	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) MSTP	Yes
• according to IEEE 802.1w-RRST	Yes
• according to IEEE 802.1x-port based Network Access Control	Yes
product conformity	
• RFC768-UDP	Yes
• RFC783-TFTP	Yes
• RFC791-IP	Yes
• RFC792-ICMP	Yes
• RFC793-TCP	Yes
• RFC826-ARP	Yes
• RFC854-Telnet	Yes
• RFC894-IP over Ethernet	Yes
• RFC1112-IGMPv1	Yes
• RFC1519-CIDR	Yes
• RFC1541-DHCP (client)	Yes
• RFC2030-SNTP	Yes
• RFC2068-HTTP	Yes
• RFC2236-IGMPv2	Yes
• RFC2284-EAP	Yes
• RFC2475-Differentiated Service	Yes
• RFC2865-RADIUS	Yes
• RFC3414-SNMPv3-USM	Yes
• RFC3415-SNMPv3-VACM	Yes
Further Information / Internet Links	
Internet link	
• to website	
• Industry Mall/RUGGEDCOM Selector	http://ruggedcom-selector.automation.siemens.com
• Siemens RUGGEDCOM	http://siemens.com/ruggedcom
• Industry Mall	http://www.siemens.com/industrial-controls/mall
• selection instrument cables and connectors	http://www.siemens.com/snst
• CAx-Download-Manager	http://www.siemens.com/cax
• industrial communication	http://www.siemens.com/simatic-net
• Information und Download Center	http://www.siemens.com/automation/net/catalog
• image database	http://automation.siemens.com/bilddb
• Industry Online Support	http://support.automation.siemens.com