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Data sheet 6GK5856-2EA00-3DA1

product type designation

MUM856-1 (EU)

SCALANCE MUM856-1 (EU) 5G- router, IP65, for wireless IP communication of Ethernet-based applications via public 3/4/5G mobile radio networks and private 5G networks, optimized for usage in Europe, VPN, firewall, NAT, IPv6, connection to SINEMA RC via CLP, 4 N- Connect connections, 1x micro SIM slot, 1x10/100/1000 Mbit/s M12 socket, redundant DC 24 V, M12 L-coded, PoE, -30… +60 °C, CLP slot, 1x DI and 1x DO, A-coded, observe national approvals.

transfer rate	
transfer rate / for Industrial Ethernet	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
transfer rate	
● with UMTS transmission / with downlink / maximum	42 Mbit/s
● with UMTS transmission / with uplink / maximum	5.76 Mbit/s
● for LTE transmission / with downlink / maximum	1000 Mbit/s
● for LTE transmission / with uplink / maximum	200 Mbit/s
● for 5G transmission / with downlink / maximum	1000 Mbit/s
● for 5G transmission / with uplink / maximum	500 Mbit/s
interfaces	
number of electrical/optical connections / for gigabit Ethernet / maximum	1
number of electrical connections	
● for network components or terminal equipment	1
number of electrical connections	
● for external antenna(s)	4
● for power supply	1
● for redundant voltage supply	1
type of electrical connection	
● for network components or terminal equipment	M12 (8-pin, X-coded), PoE
● for external antenna(s)	N-Connect (socket)
● for redundant voltage supply	M12 (4-pin, L-coded)
memory	
number of slots / for Micro-SIM card	1
design of the removable storage / CLP	Yes
signal inputs/outputs	
number of digital inputs	1
number of digital outputs	1
type of electrical connection / at the digital inputs/outputs	M12 (4-pin, A-coded)
signal range	
● at digital input	DC, -30 V ... 30 V
● at digital output	DC 24 V / 0.5 A
operational current / of the signaling contacts / at DC / at 30 V / maximum	0.008 A
WAN connection	
type of wireless network / is supported	5G public networks, 5G private networks, LTE, UMTS
type of mobile wireless service / is supported	HSDPA, HSUPA, HSPA+
frequency band / is supported	
● 5G Standalone (SA)	n1, n3, n5, n7, n8, n12, n20, n28, n38, n40, n41, n48, n71, n77, n78, n79
● 5G Non-Standalone (NSA)	n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n48, n66, n77, n78, n79

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● LTE	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B66, B71, B34, B38, B39, B40, B41, B42, B43, B46, B48
● UMTS	B1, B2, B3, B4, B5, B8
supply voltage, current consumption, power loss	
supply voltage / from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af	48 V
type of voltage / of the supply voltage	redundant supply, DC, 24V, M12, L-coded
consumed current	
● at DC / at 24 V / typical	0.55 A
● with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.27 A
power loss [W]	
● at DC / at 24 V / typical	13.2 W
● with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	12.96 W
supply voltage / 1 / rated value	24 V
● type of voltage / 1 / of the supply voltage	DC
supply voltage / 2 / rated value	24 V
● type of voltage / 2 / of the supply voltage	DC
supply voltage / 3 / rated value	48 V
● type of voltage / 3 / of the supply voltage	DC, PoE
ambient conditions	
ambient temperature	
● during operation	-30 ... +60 °C
● during storage	-40 ... +85 °C
relative humidity / at 25 °C / during operation / maximum	95 %
protection class IP	IP65
design, dimensions and weights	
depth	45 mm
height	179 mm
width	166 mm
net weight	1100 g
fastening method	Wall mounting, mounting on a DIN rail with a separate mounting adapter
● 35 mm top hat DIN rail mounting	Yes
● wall mounting	Yes
product features, product functions, product components / general	
product function	
● DynDNS client	Yes
● no-ip.com client	Yes
product functions / management, configuration, engineering	
product function	
● CLI	Yes
● web-based management	Yes
● MIB support	Yes
● TRAPs via email	Yes
protocol / is supported	
● Telnet	Yes
● HTTP	Yes
● HTTPS	Yes
type of configuration	Web-based management
product functions / diagnostics	
protocol / is supported	
● SNMP v1	Yes
● SNMP v2	Yes
● SNMP v2c	Yes
● SNMP v3	Yes
product function	
● statistics Packet Size	No
● statistics packet type	No
● error statistics	No
● SysLog	Yes
● packet filter log	Yes

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product functions / DHCP	
product function	
● DHCP client	Yes
● DHCP server - internal network	Yes
product functions / routing	
router function	
● NAT (IP masquerading)	Yes
● port forwarding	Yes
● NAT traversal	Yes
● 1:1 NAT	Yes
● DNS cache	Yes
product functions / security	
suitability for operation / Virtual Private Network	Yes
firewall version	Statefull Inspection
product function	
● password protection	Yes
● packet filter	Yes
● broadcast/multicast/unicast limiter	No
product function	
● broadcast blocking	No
● with VPN connection	IPsec, OpenVPN (as Client)
number of possible connections / with VPN connection	20
type of authentication / with Virtual Private Network / PSK	Yes
protocol / is supported	
● IPsec tunnel and transport mode	Yes
key length	
● 1 / with IPsec AES / with Virtual Private Network	128 bit
● 2 / with IPsec AES / with Virtual Private Network	192 bit
● 3 / with IPsec AES / with Virtual Private Network	256 bit
● with IPsec 3DES / with Virtual Private Network	168 bit
type of Internet key exchange / with Virtual Private Network	
● main mode	Yes
● quick mode	Yes
type of packet authentication / with Virtual Private Network	MD5, SHA-1, SHA-256, SHA-384, SHA-512
IETF profile / with Virtual Private Network / X.509v3 certificate	Yes
product functions / time	
protocol / is supported	
● NTP	Yes
● SNTP	Yes
standards, specifications, approvals	
standard	
● for EMC	ETSI EN 301 489-1, ETSI EN 301 489-19, ETSI EN 301 489-52, EN 55011, NAMUR NE21
● for emitted interference	CISPR 32, ETSI EN 55032 Class A / Class B, EN IEC 61000-6-3, EN IEC 61000-6-4
● for interference immunity	CISPR 35, EN 55035, EN IEC 61000-6-1, EN IEC 61000-6-2
certificate of suitability	
● EC Declaration of Conformity	Yes
● CE marking	Yes
● Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
● railway application in accordance with EN 50121-3-2	Yes
● railway application in accordance with EN 50121-4	Yes
● railway application in accordance with EN 50155	Yes; no coated printed-circuit boards, EMC: trackside unit/vehicle unit, climate: use in the vehicle within equipment boxes/cabinets, mechanical system: class B: in equipment housing
● fire protection in accordance with EN 45545-2	Yes
further information / internet links	
internet link	
● to website: Industrial communication	http://www.siemens.com/industrial-5g
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter

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● to website: Selection guide for cables and connectors	http://www.siemens.com/tia-selection-tool
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx-Download-Manager	http://www.siemens.com/cax
● to website: Industry Online Support	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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