SIEMENS

Data sheet

6GK7142-7EX00-0AX0



LOGO! CMR2040 communication module for connection LOGO! 8 to LTE network; 1 RJ45 port for Ind. Ethernet connection to LOGO! 8; 2xDI; 2xDQ; Write/read access to LOGO! tags; Text message sending/ receipt; E-mail sending; Position detection GPS; Time synchronization/ forwarding with real-time clock; Configuration/diagnostics via web interface; Remote access via OpenVPN/HTTPs, DynDNS, observe national approval! Manual available as a download

transfer rate	
transfer rate	
• at the 1st interface	10 100 Mbit/s
 for GPRS transmission 	
— with downlink / maximum	85.6 kbit/s
— with uplink / maximum	85.6 kbit/s
 for LTE transmission 	
— with downlink / maximum	100 Mbit/s
— with uplink / maximum	50 Mbit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	1
number of electrical connections	
 at the 1st interface / acc. to Industrial Ethernet 	1
 for external antenna(s) 	2
 for power supply 	1
number of slots	
• for SIM cards	1
 for memory cards 	1
type of electrical connection	
 at the 1st interface / acc. to Industrial Ethernet 	RJ45 port
type of electrical connection	
 for external antenna(s) 	SMA socket (50 ohms)
 for power supply 	3-pole terminal block
type of antenna	
 at connection 1 / connectable 	GPS Antenna
 at connection 2 / connectable 	Mobile radio antenna (GPRS/GSM, UMTS, LTE)
wire length / of antenna wire / maximum	15 m
slot version	
 for SIM card 	Standard
 of the memory card 	microSD
storage capacity / of the memory card / maximum	32 Gibyte
performance class of the memory card / minimum necessary	Class 6
type of file system / type of file system	FAT32
signal inputs/outputs	
number of electrical connections / for digital input signals	2
type of electrical connection / for digital input signals	3 pole terminal block
digital input version	not galvanically isolated, not debounced
input voltage / at digital input	

 with signal <0> / at DC 	0 5 V
- for signal (1) / of DC	0.5 0414
• for signal <1> / at DC	8.5 24 V 5.5 mA
input current / at digital input / for signal <1> / maximum number of electrical connections / for digital output signals	2
type of electrical connection / for digital output signals	2 3 pole terminal block
digital output version	transistor, not potential seperated
output voltage / at digital output	transistor, not potential seperated
• for signal <1> ¹⁾	12 24 V
• for signal <0>	0 5 V
output current / at digital output / for signal <1> / maximum	0.3 A
wireless technology	
type of mobile wireless service	
is supported / SMS	Yes
• is supported / GPRS	Yes
• note	LTE
type of wireless network / is supported	
• GSM	Yes
• UMTS	Yes
• LTE	Yes
operating frequency / for GSM transmission	900 MHz, 1800 MHz
operating frequency / with UMTS transmission	850 MHz, 900 MHz, 2100 MHz
operating frequency / for LTE transmission	800 MHz, 1800 MHz, 2600 MHz
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
supply voltage / external	12 24 V
supply voltage / external / at DC	12 24 V
supply voltage / for GPS antenna / maximum	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V
relative positive tolerance / at DC / at 24 V	20 %
relative negative tolerance / at DC / at 12 V	10 %
consumed current	
 from external supply voltage / at DC / at 12 V / maximum 	0.25 A
 from external supply voltage / at DC / at 24 V / maximum 	0.125 A
output current / for GPS antenna / maximum	15 mA
power loss [W]	3 W
ambient conditions	
ambient temperature	
during operation	-20 +70 °C
 during storage 	-40 +85 °C
during transport	-40 +85 °C
relative humidity	
 at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP20
design, dimensions and weights	
module format	Compact module, for rail mounting
width	71.5 mm
height	90 mm
depth	58.2 mm
net weight	0.16 kg
fastening method	
 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
performance data	
number of possible connections / to the LOGO! logic	1

module	
number of users/telephone numbers/email addresses /	20
definable / maximum	20
number of user groups / definable / maximum	10
number of signals / for monitoring or device control /	32
definable / maximum	
number of events / for monitoring / definable / maximum	32
number of actions / definable / maximum	32
number of assignments / definable / maximum	32
number of alias SMS commands / definable / maximum	20
number of constants / definable / maximum	10
performance data / IT functions	
number of possible connections	
 as server / by means of HTTP / maximum 	2
 as server / by means of HTTPS / maximum 	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.
• as email client / maximum	1
number of free texts / for emails and SMS / maximum	20
number of characters / per free text for emails or SMS /	160
maximum	
performance data / teleservice	
product function	
 remote firmware update 	Yes
 remote configuration 	Yes
product functions / management, configuration, engineeri	ng
configuration software	
required	Web interface
product functions / diagnostics	
product function / web-based diagnostics	Yes
product functions / security	
product functions / security operating mode / Virtual Private Network (VPN)	Yes; Open VPN Server in PSK mode
	Yes; Open VPN Server in PSK mode OpenVPN PSK
operating mode / Virtual Private Network (VPN)	
operating mode / Virtual Private Network (VPN) product function / with VPN connection	OpenVPN PSK
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection	OpenVPN PSK AES-128 CBC
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK	OpenVPN PSK AES-128 CBC Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection	OpenVPN PSK AES-128 CBC Yes SHA-256
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection	OpenVPN PSK AES-128 CBC Yes SHA-256
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function	OpenVPN PSK AES-128 CBC Yes SHA-256 1
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes Yes Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes Yes Yes Yes 7.5 s
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes Yes Yes Yes Yes Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting product functions / position detection	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting product functions / position detection product function	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting product functions / position detection product function	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting product function product function • position detection with GPS • pass on position data	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes
operating mode / Virtual Private Network (VPN) product function / with VPN connection type of encryption algorithms / with VPN connection type of authentication / with Virtual Private Network / PSK type of hashing algorithms / with VPN connection number of possible connections / with VPN connection product function • password protection for Web applications • password protection for VPN • encrypted data transmission • switch-off of non-required services • log file for unauthorized access product function / pass on time synchronization accuracy / of the hardware real time clock / per day / maximum time synchronization • from NTP-server • from GPS-signal • from mobile network provider • PC • manual setting product functions / position detection product function	OpenVPN PSK AES-128 CBC Yes SHA-256 1 Yes

further information / internet-Links	
Internet-Link	
 to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
 to website: Industrial communication 	http://www.siemens.com/simatic-net
 to website: Industry Mall 	https://mall.industry.siemens.com
 to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
 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)

a ¹) Value of the actual supply voltage

last modified:

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