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Data sheet 6GK7142-7BX00-0AX0

Product type designation

LOGO! CMR2020

LOGO! CMR2020 COMMUNICATION MODULE FOR CONNECT. LOGO! 8 TO GSM/GPRS NET; 1 RJ45 PORT FOR IND. ETHERNET-CONECTION TO LOGO! 8; 2XDI;2XDO; READ/WRITE-ACCESS TO LOGO!-VARIABLES; SMS SEND/RECEIVE; Email SEND; POSITION RECOGN. GPS; TIME SYN./FORWARDING WITH REAL TIME CLOCK; CONFIG./DIAG.PER WEB-INTERFACE; Remote Access VIA OpenVPN/HTTP, DYNDNS; NOTE NATIONAL APPROVALS! MANUAL AVAILABLE AS DOWNLOAD.

Transmission rate	
Transfer rate	
• at the 1st interface	10 ... 100 Mbit/s
• for GPRS transmission	
— with downlink / maximum	80 kbit/s
— with uplink / maximum	40 kbit/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

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• for external antenna(s)	SMA socket (50 ohms)
• for power supply	3-pole terminal block
Type of antenna	
• at port 1 / connectable	GPS Antenna
• at port 2 / connectable	Mobile radio antenna (GPRS/GSM)
Wire length / of antenna cable / 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
Input voltage / at digital input	
• with signal <0> / at DC	0 ... 5 V
• for signal <1> / at DC	8.5 ... 24 V
Input current / at digital input / for signal <1> / maximum	5.5 mA
Number of electrical connections / for digital output signals	2
Type of electrical connection / for digital output signals	3 pole terminal block
Digital output version	transistor, not potential seperated
Output voltage / at digital output	
• 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	GPRS (Multislot Class 10, Mobile Station Class B)
Type of mobile network / is supported	
• GSM	Yes
• UMTS	No
• LTE	No
Operating frequency	
• for GSM transmission / 850 MHz	Yes

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• for GSM transmission / 900 MHz	Yes
• for GSM transmission / 1800 MHz	Yes
• for GSM transmission / 1900 MHz	Yes
• with UMTS transmission / 850 MHz	No
• with UMTS transmission / 900 MHz	No
• with UMTS transmission / 2100 MHz	No
• for LTE transmission / 800 MHz	No
• for LTE transmission / 1800 MHz	No
• for LTE transmission / 2600 MHz	No

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 / Rated value	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

Permitted 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 weight

Module format	Compact module, for rail mounting
Width	71.5 mm
Height	90 mm
Depth	58.2 mm
Net weight	0.16 kg
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Product properties, functions, components / general

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Product function	
• DynDNS client	Yes
• no-ip.com client	Yes

Performance data	
Number of possible connections / to the LOGO! logic module	1
Number of users/telephone numbers/email addresses / definable / maximum	20
Number of user groups / definable / maximum	10
Number of signals / for monitoring or device control / definable / maximum	32
Number of events / for monitoring / definable / maximum	32
number of actions / definable / maximum	32
Number of relations / definable / maximum	32
Number of alias-SMS-command / definable / maximum	20
Number of constants / definable / maximum	32

Performance data / IT functions	
Number of possible connections	
• as server / by means of HTTP / maximum	2
• as server / by HTTPS / maximum	2
• as e-mail client / maximum	1
Number of free texts for e-mails / definable by user	20; maximum of 160 characters per user defined text

Performance data / Teleservice	
Product function	
• Remote firmware update	Yes
• remote configuration	Yes
Configuration software	
• required	No, configuration by using the integrated webserver

Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes

Product functions / Security	
Suitability for operation / Virtual Private Network	Yes
Type of authentication / with Virtual Private Network / PSK	Yes
Number of possible connections / with VPN connection	1
Product function	
• password protection for Web applications	Yes
• password protection for VPN	Yes
• encrypted data transmission	Yes

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• switch-off of non-required services	Yes
• log file for unauthorized access	Yes

Product functions / Time	
Product function / pass on time synchronization	Yes
Accuracy / of the hardware real-time clock / per day / maximum	7.5 s
time synchronization	
• from NTP-server	Yes
• from GPS-signal	Yes
• from mobile network provider	Yes
• PC	Yes
• manual setting	Yes

Product functions / Position recognition	
Product function	
• position detection with GPS	Yes
• pass on position data	Yes

Further Information / Internet Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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

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[1]) Value of the actual supply voltage

last modified: 06/08/2017

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