



SLK-R690-5G

Industrial 5G CPE

Data Sheet

Version: V1.0

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Product Introduction



Introduction:

SLK-R690-5G is a multi-functional wireless 5G CPE product with high-performance 4-core CPU, high power WiFi6, and integration of cellular 5G network. Supports 5x 1000M Ethernet ports, which can be configured as LAN/WAN ports, you can choose DC48V POE power out version, 2X2 MIMO 2.4g /5.8G WIFI6, etc. It also adopts wide temperature, wide voltage input and EMC test with electromagnetic compatibility.

Has been widely used in the Internet of things industry chain of M2M industry, such as self-service terminals, smart grid, smart transportation, smart home, financial, mobile POS terminals, supply chain automation, industrial automation, intelligent buildings, fire control, public security, environmental protection, meteorology, digital medical treatment, telemetry, agriculture, forestry, water, coal, petrochemical and other fields.

Features:

- ✓ Qualcomm Quad-core CPU/ 1.8GHz, 8Gb DDR3, 4GB eMMC
- ✓ 802.11ac mode: PHY rate: 866.7 Mbps (5 GHz) and 400 Mbps (2.4 GHz)
or proprietary PHY rate: 1083 Mbps (5 GHz) and 500 Mbps (2.4 GHz)
- ✓ 802.11ax mode: PHY rate: 1201 Mbps (5 GHz) and 573.5 Mbps (2.4 GHz)
- ✓ Wi-Fi supported IEEE802.11ac, IEEE802.11ax
- ✓ Supported 5G SA, NSA network
- ✓ 5 x 10/100/1000M Ethernet LAN /WAN Ports (RJ45 Connector)
- ✓ 1xUSB2.0 interface, 1xRS232 port, 1xRS485 port
- ✓ 2xNANO SIM card for 5G network
- ✓ 48V POE output(optional)

Details:
Hardware :

CPU	Qualcomm Quad-core CPU/ 1.8GHZ
RAM	8Gb
eMMC	8GB
OS	LINUX /OpenWRT

Cellular Interface:

Chipset QualcommX62, 3GPP Release 16		
Band Supported SLK-R690-AE (Europe Asia, Australia)	5G Sub-6G SA	N1/3/5/7/8/20/28/38/40/41/75/76/77/78
	5G Sub-6G NSA	N1/3/5/7/8/20/28/38/40/41/77/78
	LTE FDD	Band 1/3/5/7/8/20/28/32
	LTE TDD	Band 38/40/41/42/43/46(LAA)
	WCDMA	Band 1/5/8
Band Supported SLK-R690-NA (North American)	5G Sub-6G SA	N2/5/12/14/25/30/41/48/66/70/71/77
	5G Sub-6G NSA	N2/5/12/25/30/41/66/71/77
	LTE FDD	Band 2/4/5/12/13/29/30/66/71
	LTE TDD	Band 41/48/46(LAA)
Bandwidth	NR SA: 2.47Gbps(DL) / 900Mbps(UL) NR ENDC: 3.47Gbps(DL) / 660Mbps(UL) LTE: 1.6Gbps(DL) / 211Mbps(UL) WCDMA: 42Mbps(DL) / 5.76Mbps(UL) Note: The actual network speed and bandwidth depends on the local carrier network and signal.	

Standalone GPS

Multi-GNSS engine	GPS, GLONASS, BeiDou, Galileo and QZSS
LNA	Built-in LNA for better sensitivity
Supported Bands	GPS L1 C/A: 1575.42 MHz Galileo E1: 1575.42 MHz QZSS L1: 1575.42 MHz GLONASS L1: 1602.5625 MHz BeiDou B1: 1561.098 MHz
Channel	Tracking: 48 Fast Acquisition: 2
Horizontal Position Accuracy	Autonomous: < 1.5 m CEP
Velocity Accuracy	Without Aid: < 0.1 m/s
Acceleration Accuracy	Without Aid: < 0.1 m/s ²
TTFB (without	Cold Start: < 32 s Warm Start: < 25 s Hot Start: < 2 s

AGNSS)	
Sensitivity	Acquisition: -145 dBm Tracking: -162 dBm Reacquisition: -152 dBm
Protocols	NMEA 0183

WIFI Performance:

WIFI supported	
Wireless	High power WiFi performance On-board 2x2 2.4GHz 802.11b/g/n, max 21dBm per chain @-35dB DEVM On-board 2x2 5GHz 802.11a/n/ac/ax/max 20dBm per chain @-40dB DEVM
Frequency	2.412GHz to 2.472GHz and 5.150GHz to 5.825GHz, simultaneous dual band
WIFI Rate	2x2 MU-MIMO On-board WiFi 2.4GHz radio, up to 574Mbps physical data rate, TCP data up to 400Mbps
	2x2 MU-MIMO On-board WiFi 5GHz radio, up to 1201Mbps physical data rate, TCP data rate up to 800Mbps
Modulation Techniques	802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g: OFDM (BPSK / QPSK / 16-QAM / 64-QAM) 802.11ac/n: OFDM (BPSK / QPSK / 16-QAM / 64-QAM / 256-QAM) 802.11ax: OFDM 1024QAM

Router characteristics:

Router characteristics	
Firewall	Network Address Translation (NAT)
	State full Packet Inspection (SPI)
Media Access Control	CSMA/CA with ACK
WiFi	AP, Client
VPN protocol	PPTP,L2TP ,OpenVPN Client, SERIALLINK VPN Client
DHCP	Build-in DHCP (Dynamic Host Configuration Protocol)
Others protocol	Supported PPP,PPPOE,DDNS,ICMP,VRRP etc

Interface:

LAN/WAN Ports	5x 10/100/1000M LAN/WAN ports(RJ45 Connector)
Serial Ports	1x RS232 port (RJ45 connector)
	2xRS485 ports
USB Port	1x USB2.0 interface
Reset	1x Reset
Antennas	1x 2PIN Mini FAKRA WIFI Antennas interface (50Ω)
	1x 4PIN Mini FAKRA 5G Antennas interface (50Ω)
	1x FAKRA GPS Antennas interface
LED	Power-SYS-4G-5G-Signal strength - LEDs
SIM Card Slot	Dual-SIM card slot ,supported e-SIM card
POE Ethernet	Supported 48V POE output(optional)

Power interface :

Default power	DC 12V/2A power adapter (US,EU etc stander option)
Power connector	GX16 3PIN (DC+, DC-, ACC power control)
Input VDC	12~55VDC
Power Consumption	24W (Max)

Physical property:

Physical property:	
Operating Temperature	Storage Temperature: (-40°C to 85°C)
	Operating Temperature: (-40°C to 75°C)
Relative Humidity	95%
Size	L*S*H:
Weight	Net weight:
	Packing weight:
Certification	CCC,CE,FCC,RHOS

Others:

Warranty	2 years
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Order information:

Model	SLK-R690-AE 5G CPE ,2xWIFI antennas,4X 5G Antenans,1x 24V/1A Power adapter, 1x RJ45 Cable
SLK-R690-AE	
SLK-R690-NA	SSLK-R690-NA 5G CPE ,2xWIFI antennas, 4X 5G Antenans,1x24V/1A Power adapter, 1x RJ45 Cable
SLK-R690-AE(POE)	SLK-R690-AE(POE) 5G CPE ,2xWIFI antennas,4X 5G Antenans,1x 52V/1.5A Power adapter, 1x RJ45 Cable
SLK-R690-NA(POE)	SLK-R690-NA(POE) 5G CPE ,2xWIFI antennas,4X 5G Antenans,1x 52V/1.5A Power adapter, 1x RJ45 Cable

Thank you for your support of SERIALLINK products.

If you have any questions, please email: info@seriallink.net or www.seriallink.net