

Edge Computing Gateway

The SMANEX SEC413G/513G IoT Edge Computing Gateway is a 4G/5G programmable network device equipped with essential protocols and customizable I/O interfaces. It features a robust CPU and NPU based on the Linux platform, optimizing applications in solar energy, water treatment, oil and gas, traffic, and factory automation. Additionally, it provides versatile connectivity options, including Ethernet, RS232/485, DI/O, WiFi, and MQTT/HTTPS protocols, all compatible with AWS and Azure platforms. When integrated with the Edge Computing Gateway, it facilitates 5G connectivity for eMBB (high bandwidth and speed), URLLC, or mMTC (smart city IoT network).



Hardware Spec

Characteristics	CPU	Quad-core ARM Cortex-A55 up to 2.0GHz
	NPU/GPU	1 TOPS/ ARM G52 2EE
	RAM	4GB
	eMMC	32GB
Interfaces	Ethernet	1*WAN/LAN, 4*LAN 10/100/1000Mbps
	Serial Port	RS232*2, RS485*2
	HDMI	1*HDMI 2.0, 4K@60Hz
	SD socket	1*Micro SD slot, 32G Max
	SSD	4T Max
	USB	2*USB2.0,1*OTG
	Console	RS232
	SIM	2
	WiFi	IEEE802.11a/b/g/n/ac
	Antenna	3G/4G: SMA*2 5G: SMA*4
	GPS (optional)	SAM*1
Power	Power Input	DC12-48V, POE (optional)
	Consumption (operation)	350mA@12VDC (3/4G) 500mA@12VDC (5G)
	Consumption (stand-by)	260mA@12VDC
Ambient Temperature	Relative humidity	≤ 95% (no condensation)
	Operating Temperature	-40 ~ +75℃
	Storage Temperature	-40 ~ +85℃
Certificate	EMC	EN61000-4-2, level 4 EN61000-4-3, level 3 EN61000-4-4, level 4 EN61000-4-6, level 3 EN61000-4-8, >level 4

FEATURES

Software Spec

Operating System	Ubuntu 22.04	
Network	Connectivity	3G/4G/5G
	WAN	Static IP, DHCP, PPPoE
Protocols	IP Routing	Static Router, RIP, OSPF
	DDNS	DYDNS, CHANGEIP, 88ip, 3322
Security	Firewall	NAT, PAT, DMZ, Port Forwarding, Virtual Server
	VPN	IPSec VPN, L2TP, PPTP, GRE, OPENVPN
Industrial Protocol	Northbound	Modbus TCP、IEC104、BACnet IP、MQTT
	Southbound	Modbus RTU/ASCII、Modbus TCP、DL/T645、IEC101、IEC104、BACnet IP、BACnet MS/TP、PLC
	PLC Brand	Siemens、Schneider、AB、Delta、OMRON、Mitsubishi、Panasonic
Reliability	Redundancy	Dual SIM
	Link On-line Detection	Keep Session ICMP, Internet Control Message Protocol
	Embedded Watch Dog	Hardware Watch Dog
Management	Configuration	Local or Remote HTTP, HTTPS, Telnet, SSH
		Parameter Backup and Recovery
		SNMP
	Upgrade	Configuration via cloud platform
		Local upgrade
		Remote upgrade via WEB/TFTP/FTP Upgrade via cloud server
	Log Management	Local and remote log management
Reboot	Remote reboot with scheduling	
PING	Internet diagnosis	