General Availability

SecFlow-1c-4G
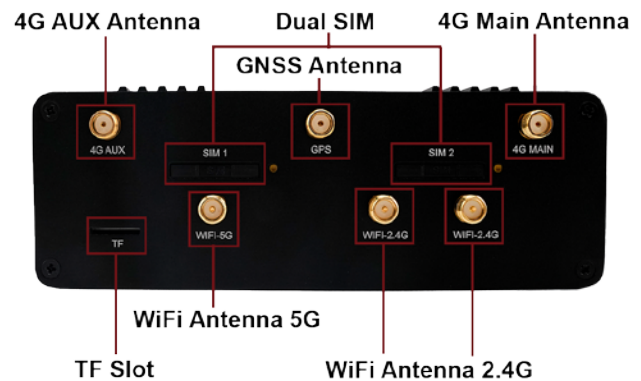## Industrial LTE Cellular Router

- Industrial Design, DIN Rail Mounting Supported
- 4G LTE Cat 4
- Reliable Connectivity with Dual SIM
- IEEE 802.11 b/g/n/ac, 2.4/5 GHz
- VPN Secure Connection
- 4 Ethernet Interfaces (1 WAN, 3 LAN)
- RS-232 and RS-485 Serial Ports
- 3 GPIO ports
- GNSS Location
- Smart field upgrade with TF card
- External storage

SecFlow-1c-4G is an industrial LTE cellular router designed to meet rugged specifications, DIN rail mounting, and improved cellular connectivity (up to 150 Mbps). The product empowers industrial automation, smart city, and other data-intensive IoT applications in the transportation and retail sectors.

Front View
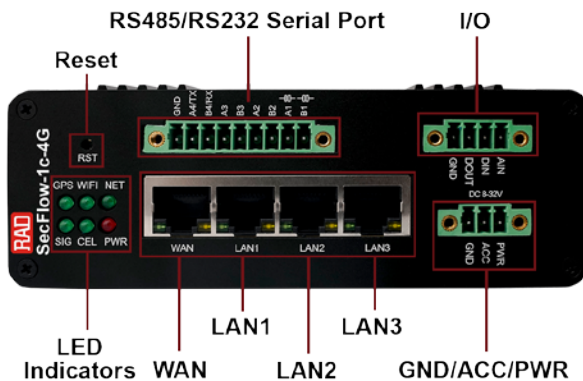
Rear View

Front and Rear Panels

RAD
Your Network's Edge®

SecFlow-1c-4G
Industrial LTE Cellular Router

Specifications

HARDWARE

Ethernet Ports	1 x LAN/WAN (10/100Mbps), 3 x LAN (10/100Mbps)
Mobile	4G LTE CAT 4, 3G, 2G
Wi-Fi	IEEE 802.11 b/g/n/ac, 2.4/5 GHz
Serial Ports	1 x RS-232
	3 x RS-485
TF Slot	1
WiFi Antennas	3 x RP-SMA
GNNS Antenna	1 x SMA
GPIO	3 x GPIO – DI, DO, AI
LED indicators	Power, Network Connection, Wi-Fi, GNSS, Mobile Status and Signal Strength, WAN
Reset Button	1

CELLULAR AND GPS

SIM Slots	2
SIM Switch	2 SIM cards, auto-switch cases: weak signal, data limit, data connection fail
Mobile Antennas	2 x SMA
Protocols	Cellular IP Context. PPP, PAP, CHAP, APN per SIM
GPS	GPS, GLONASS, BeiDou, Galileo, NMEA forwarding (if GPS is hardware-supported)
LTE Global Modem Bands	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28 LTE TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
LTE Data Speed	**LTE** LTE-FDD: Max 150Mbps (DL)/Max 50Mbps (UL) LTE-TDD: Max 130Mbps (DL)/Max 30Mbps (UL) **UMTS** DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL) **GPRS** Max 107Kbps (DL)/Max 85.6Kbps (UL) **EDGE** Max 296Kbps (DL)/Max 236.8Kbps (UL)

WI-FI

Mode	Access Point, Client
Radio Mode	IEEE 802.11 b/g/n/ac, 2.4/5 GHz
Wi-Fi Data Speed	Up to 433Mbps for 802.11ac 80 MHz channel data rates

MANAGEMENT

Access Control	Flexible access control of SSH, Web interface, CLI, RADIUS
	Management access control. Possible to block access from local ports, or to block specific protocols (Web, SSH, etc.)
Protocols and Security	SSH (v1, v2), TLS 1.2, 1.3
	SSH From LAN, WAN (ETH/Cellular)
	HTTPS From LAN, WAN (ETH/Cellular)
	SNMP (v1, v2, v3), SNMP Traps, access rights
	SYSLOG
WEB UI	Status, configuration, SW update, CLI, troubleshooting, availability notifications, event log, system log, kernel log, Internet status, configuration backup, FOTA
Serial Functions	Console, Serial over IP, Modem, MODBUS gateway
MQTT	MQTT Broker, MQTT publisher
Modbus MQTT GW	Allows sending commands and receiving data from MODBUS server through MQTT broker
ModBus	Modbus master, Modbus client
SMS	SMS based device emergency actions
	Reboot, switch SIM card, get status, restore factory setting
Programmable Reboot	Every day/week, or cellular interface restart
Continuous ICMP Ping	Every X seconds to central IP
Configuration Management	Config download/upload using HTTPS or using CLI (sFTP)
Firmware Management	Firmware upload using HTTPS or using CLI (sFTP)
Statistics	Ports & CPU statistics available via CLI/Web/SNMP

RESILIENCY

Network Backup	Automatic failover between Mobile, Wi-Fi WAN and wired links
Load Balancing	Auto load balance over Mobile, Wired or WiFi links

SecFlow-1c-4G
Industrial LTE Cellular Router

NETWORKING CAPABILITIES

Network Protocols	NTP (Server, GPS synchronization)
	DNS, DDNS: DNS Client, Bind dynamic IP to static hostname
DHCP	Server, Client, Static and dynamic IP allocation
VPN	PPTP, L2TP, IPsec, GRE, OpenVPN
VLAN	802.1q
Firewall	L2/L3/L4 ACL
	Web Filter
	IP/Domain Filter
	Blacklist, Whitelist
	NAT/SNAT/DNAT
	MAC Filter
	DDOS Prevention
Routing	Static Routing
	Dynamic routing (RIP)

DIAGNOSTICS

Features	Tcpdump
	Ping
	Tracert
IP Monitoring	Ping Reboot
	LCP and ICMP for link inspection
	Timing Task
DI /DO /AI	Status, report, switch

GENERAL

Environment

Casing Material	Aluminum housing
Operating Temperature	-30⁰C - +75⁰C
Storage Temperature	-40⁰C - +85⁰C

Physical

Height	45 mm
Width	130 mm
Depth	100 mm
Weight	494g

Power

Power Socket	PWR, ACC detection, GND
Input/Output	4 Pins, GND, DI, DO, AI
Operating Voltage	8 – 32 VDC

Ordering

SF-1C-Q1/LT/GL

SecFlow-1c-4G, global region LTE bands

OPTIONAL ACCESSORIES

SF-1C-AC-12VDC-24W-2A

External AC to 12 VDC 24W 2A power supply

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