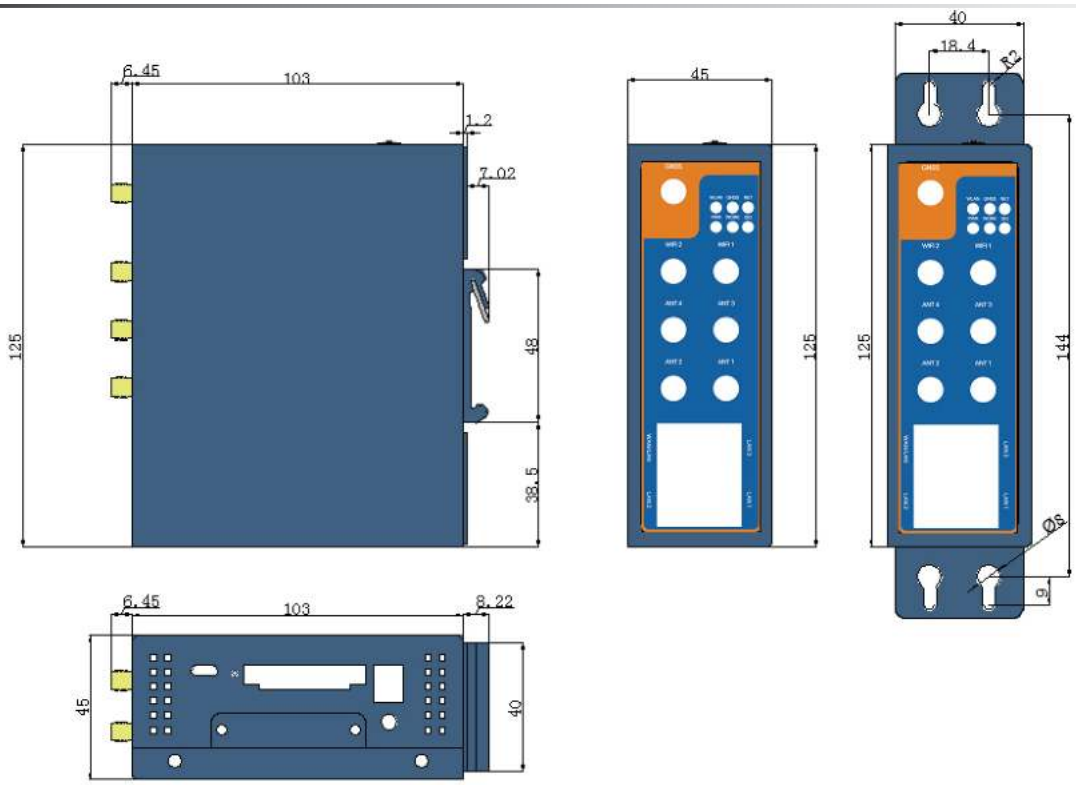
5G SA/NSA Industrial Router

LS5GLTE-4E-W is a all-in-one fixed/mobile wireless communications platform with advanced software for mission critical applications.The compact rugged design integrates dual SIMs, four-port Gigabit Switch, 802.11ac and 802.11n Wi-Fi Access Point, RS232/485,embedded cellular module that supports WCDMA, 4G LTE and 5G sub-6 GHz NSA and SA network. It supports an extended operating temperature range from -35 ~ +75℃ and a flexible power input voltage range of 9-36V DC making it suitable for diverse environments and applications.

FEATURES

- Industrial grade design, Rugged enclosure with IP30 protection, optimized for DIN rail or shelf mounting.
- Wide operating temperature.Wide voltage input,reverse polarity protection.
- ESD,Surge,EFT protection.
- Embedded hardware watchdog, self-recovers from malfunctions, maintaining high device availability.
- Global 5G (NSA/SA)/4G LTE network with dual SIM cards for backup between multiple carrier networks
- Plug& play, supply lightning transmission via Gigabit Ethernet ports
- Support 802.11b/g/n/ac Wave 2(Wi-Fi 5), allows 24G & 5.8G dual band concurrent data transmission rates up to 867 Mbps (Dual Band, MU-MIMO),Access Point (AP), Station (STA),repeater
- 4 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
- Automated failover/failback backup among Ethernet, Cellular (dual SIM) and Wi-Fi
- Secure transmission with VPN tunnels like PPTP/L2TP/enhanced OpenVPN
- Supports APN/VPDN sim card.
- Supports serial port transparent transmission, Modbus RTU to TCP, HTTP.
- Supports ICMP keepalive check and heartbeat packet check to ensure the highest level of availability
- Supports DDNS, static routing, easy access to routers and subnets under routers.
- Firewalls, NAT, DMZ, port forwarding, and access restriction are supported.
- Local and Remote management via Web GUI, SNMP
- Embedded GNSS option for real-time asset tracking and location data-based applications
- Supports serial ports (RS232/RS485), enabling you to scale up M2M applications.

FEATURES



- Unit: mm.
- Dimensions: 125.0*103.0*45.0mm(L*W*H).Power terminal, antenna connector are not included.
- Installation Method: 35mm DIN-rail mounting,Panel mounting.

SECURITY SYSTEM

SPECIFICATIONS

Cellular Interface	
Frequency	*5G NR sub , 6 GHz (3GPP Rel 1 6) ; LTE-TDD: B34/38/39/40/41/42/43/48; LAA: B46; 3G WCDMA: B1/2/4/5/8/19 ;*
	Band(NA/NSA): n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/77/78/ 79;
	4G LTE (CAT 19 DL / CAT 1 8 UL) ; LTE-FDD: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71;
Maximum Transmission Data Rate	*5G SA Sub 6: Max. 2.4Gbps (DL)/Max. 900Mbps (UL); 5G NSA Sub 6: Max. 3.4Gbps (DL)/Max. 550Mbps (UL)*
	LTE-FDD: Max. 1.6Gbps (DL)/Max. 200Mbps (UL) ; WCDMA: Max. 42 (DL)/Max. 5.76 (UL)
Antennas	*4 × SMA-K Connectors (Center PIN: SMA Female)*
SIM Slot	*2 x (3 V/1.8 V) mini SIM(2FF) Push push type slot (SIM Card 2 can be configured with built in eSIM)*
Ethernet Interface	*WAN: 1 x WAN port (can be configured as LAN) 10/100/1000 Mbps, compliance with IEEE*
	802.3, IEEE 802.3u, suppo rts auto MDI/MDIX crossover,Ethernet Isolation 1.5 K V RMS
	LAN: 3 x RJ45 port, 10/100/1000 Mbps, supports auto MDI/MDIX crossover,Ethernet Isolation 1.5 K V RMS
Indicators	*PWR : red,always on after powered on*
	WORK : green,blinking every 1second when the router is ready and working properly
	NET : Mobile network type LEDs ; NET lights on after device is connected to the network.
	Green stands for 5G, green and red for 4G, and red for 3G .
	SIG: Mobile signal strength indication LED ; Green represents excellent signal, two color light represents good signal,
	red represents poor signal
	WLAN: always solid on when WiFi is enabled and working properly
	WAN: LED blinking When Connection established and data is being transferred over this port.
	LAN: LED blinking When Connection established and data is being transferred over this port.
WiFi Interface	*Antennas: 2 × SMA-K Connectors (Center PIN: SMA Female) ; MIMO: 2×2 ;*
	Standards: Concurrent dual band 802.11a/n/ac (5 .8 GHz) and 802.11b/g/n (2.4GHz)
	Modes:AP/AP+STA/AP+WDS repeater ; Data speed: Up to 1733Mbps wireless operation rate at 5.8 GHz ;
	Security: WiFi security with WPA PSK, WPA2 PSK, Mixed WPA/WPA2 PSK,WPA2 PSK CCMP;
	Transmission distance: 200 meters by line of sight.Actual transmission distance depends on environment of the site.
GNSS(Optional)	*Antenna: 1 × SMA-K Connector (Center PIN: SMA Female); Technology: GPS, GLONASS, BeiDou, Galileo ;*
	Protocol: NMEA 0183
Power Supply	*Adapter: DC 12V/2A ; Input voltage range: DC9- 36V ;*
	*Connector: DC Power Jack Barrel Type Female 5.5*2.1mm Round socket or industrial terminal block(V+,V --),*
	reverse polarity protection; Power consumption: Average current 630mA@12V and the maximum current 1.6A@12V
Serial Interface	*Numbers: 1 × RS485/RS232; Connector: Terminal block ; Data bits: 7,8 ; Stop bits: 1, 2 ;*
	Baud Rate(bps): 1200,2400,4800,9600,19200,38400,57600,115200,230400,460800(only 485)
	Signal definition: RS232: TXD, RXD, GND RS485: A, B, GND ; Parity: NONE,ODD,EVEN
Physical Characteristics	
Casing material:	*Metal shell, ingressp rotection IP30*
Dimensions	*125.0*103.0*45.0mm(L*W*H,antenna pedestal,terminal block and DIN Rail are not included)*
Installation	*Desktop, wall mounting and DIN rail mounting*
EMC	*Static IEC610004-2, level 3; Pulsed Electric Field IEC61000-4-4, level 3 ; Surge IEC61000-4-5, level 3*
Operating Temperature	*-35 ~ +75°C*
Storage Temperature	*-40 - +125°C (Non condensing)*
Relative Humidity	*5%~95%(Non condensing)*

SECURITY SYSTEM

SOFTWARE SPECIFICATIONS

Others	
Reload button	*1 × Reload*
TBD	*Debug interface (TTL Level)*
Ground protection	*Screw*
Built in	*Watch dog*
Software	
Network Protocols	*PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP, DNS, ARP, NTP, Telnet, SSH, DDNS, etc.*
VPN	*LT2P, PPTP OpenVPN*
Security	*Access Control, DMZ, Port Forwarding, SYN Flood Protection, Filtering(IP& MAC & Domain)*
Management	*Web UI*
Reliability	*WAN Failover, Dual SIM Backup*

ORDERING INFORMATION

P/N	Descriptions
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