





RI44

PROCESSOR	CELLULAR	Wi-Fi
QCA9531	4G/3G/2G with Dual	2.4GHz, 300Mbps
128MB DDR RAM,	SIM, External	AP/Station,
32MB Flash	antennas(3-9dBi)	External 5dBi antennas
ETHERNET	POWER	OPERATING SYSTEM
1x WAN 10/100/1000	-48V DC Input	Open-WRT Linux
4x LAN 10/100/1000	·	·
N 10 40	·	·

NMS

Easy remote management and monitoring for large scale deployment.



HARDWARE SPECIFICATION		
CPU	QCA9531	
FLASH	32MB	
RAM	128MB	
WAN	1x 10/100/1000 (WAN/LAN configurable with active POE out 802.3af)	
LAN	4x 10/100/1000	
Serial Interface	RS232, RS485	
SIM	2x Nano SIM	
Reset	Pinhole Reset Button	
Wi-Fi	802.11b/g/n	
Antenna	Cellular: 2x SMA Connector, Wi-Fi: 2x SMA connector	
Enclosure	Metal Enclosure	
Mounting	Wall Mount	
Design	Fan less	
Dimensions	281 x 34 x 119mm (W x H x D)	
Weight	1040 gm	
Input Power	-48 Vdc	
Operational & Environmental		
Storage Temperature	-30 ~ 70°C	
Operating Temperature	-20 ~ 60°℃	
Humidity	10 ~ 90% (non-condensing)	
Ingress Protection Rating	IP30	
SOFTWARE FEATURES		
Cellular		
Cellular Module	4G (LTE) - Cat 4 up to 150 Mbps, 3G – up to 42 Mbps, 2G – up to 236.8 Kbps	



Status	Single strength (RSSI), SINR, RSRP, RSRQ	
Band Management	Auto/User configurable & Operator Lock	
APN	Configurable, Auto APN (Planned)	
Modem configuration mode	Single SIM, Dual SIM	
SIM switching	Signal strength, ICMP echo, Data limit based	
Bridge	Direct connection (bridge) between mobile ISP and device on LAN (Planned)	
PDP Type	IPv4, IPv6, Dual stack	
Passthrough	Router assigns its mobile WAN IP address to another device on LAN (Planned)	
Wi-Fi		
Wi-Fi Mode	Access Point, Station, Guest Wi-Fi, Repeater	
Encryption	TKIP, AES	
Technology	802.11 b/g/n with 20 MHz, 40 MHz	
Authentication	WPA (PSK), WPA2 (PSK)	
TX Power	Configurable	
Wi-Fi Schedular	Scheduled ON/OFF	
Firewall & Networking		
Routing	Static routing	
Network Protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, PPP, SSH, DHCP, SNMP (Planned), TR069 (Planned)	
Connecting Monitoring	Ping Reboot, Scheduled Periodic Reboot	
Firewall features	Port forward, traffic rules, SNAT, Zone- Zone traffic control	
DHCP	Static and Dynamic	
Failover	Configurable Failover option for Cellular WAN, Wired and Wi-Fi WAN	
Authentication	Pre-shared key, X.509 certificates	
VLAN	Port based VLAN, Tag based VLAN 802.1ad	



Other	MAC binding, black/whitelisting	
VPN	Open VPN, IPsec, GRE, L2TP, PPTP	
Open VPN	TUN/TAP (Planned)	
IPsec	IKEv1, IKEv2, supports up to 4x VPN IPsec client. Encryption: 3DES, AES128, AES192, AES256	
PPTP, L2TP	WAN with PPTP/L2TP configuration for secure broadband connection	
Gateway		
Gateway Protocols	Modbus RTU, Modbus TCP	
Data Sender	HTTP, MQTT, Azure MQTT	
Remote Management		
NMS	Remote monitoring of SILBO Networking products	
NMS VPN	Remote access of SILBO and non SILBO Networking products using NMS VPN	
Operating System		
Operating System	Open-WRT based Linux OS	
Supported Languages	Shell scripting, C, C++, Python (Optional)	
Development tools	SDK package with built environment provided (Optional)	
Standard Packaging	Product 2x Cellular Magnetic Mount Antennas 2x Wi-Fi Magnetic Mount Antennas 0.5-meter Ethernet cable RS485 TB Power TB	



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