



Integrated Gateway Series IG-215-L2

Product Overview

IG-215-L2 router is designed for fast networking. The equipment adopts ARM based architecture and is a single board edge computing platform with integrated AI modules designed, developed, manufactured and supported from India (in Make-in-India adaptation) with industrial grade chipset, built in 4G/LTE an 5G optional supports of module, with hardware watchdog design, automatic disconnection, to ensure that the equipment is always online.

The platform is designed with flexibility to achieve customized requirements and cost considerations. ECQ6018A is a turnkey platform that comes with hardware, software, OS, libraries, drivers and tool-chain required for developing the desired products and solutions. SYSTROME has developed in this unit a high end enterprise grade router edge unit as integrated a Qualcomm processor subsystem running at 1.8GHz. It is suitable for 802.11ax, LTE CAT 4/5, 5G, Edge, Hotspot, VPN, ACL (Access Control). It supports a variety of VPN protocols (PPTP, L2TP), PPPOE, DHCP and other network protocols. It is widely used in wireless networking, video monitoring, ATM fast networking, water conservancy monitoring, vehicle networking, environmental monitoring and other fields.

Hardware Specification:

Configuration Information	Flash / DDR2: Default 32MB (Optional for 8/16/64MB)/ Default 3GB DDR4 (Optional for 1/2GB)
Interface	1 10 / 1000M WAN ports, / 2 x GE SFP Combo3 x GE TX / 1 x Combo (2.5 GB) 4 x GE TX
Power switch	Switch button of machine power supply/ POE (Optional) 1st GE TX interface
Sim Slot/other Features	2/ Buzzer, RTC, Watchdog Timer, Temp Sensor, Network Bypass
4G/5G	Supports/ Mini PCIe/ M.2 (Optional) 2
USB 2.0/3.0 2/ Console	USB 2.0/3.0 2 / RS232 (RJ45)
Power	1x DC Jack Connector: 12V/ Reset -1 , WPS -1
Other	
Packaging Accessories	Warranty card, router, user manual
	Operating temperature: - 10°C to 55 °C
	Storage temperature: - 40 °C to 70 °C
Use Environment	Working humidity: 10% to 90% RH without condensation
	Storage humidity: 5% to 90% RH without condensation

Software Specifications:

VPN	GRE, IPsec, Tunnel (IPsec client, IPsec server)	
VPN Management	Two kinds of VPN connections	
	Supports IP-Sec	PPTP/SSTP/GRE
	Supports IKE V1(main & Aggressive)	
Strong	Pre Shared	
	Key + certificate	PSK and certificate for IKE v1
	DPD	DPD + DPD and its action are available, (clear/reset/hold/restart for DPD)
	Encryptions (phase1) ESP	3des/des/Aes-128/192/256-CBC, Aes-128/192/256-GCM, blowfish, 3des, cast-128, Aes-(128/192/256)-GCM (in all three bit-64,128,192), blowfish (in all three bit-256,128,192),cast-128
	Encryptions (phase2) ESP	3des/des/Aes-128/192/256-CBC, Aes-128/192/256-GCM, blowfish, 3des, cast-128,Aes-(128/192/256)-GCM (in all three bit-64,128,192), blowfish (in allthree bit-256,128,192), cast-128
Rich VPN	Hashing (Phase1)AH	MD5/sha1/sha256//sha384/sha512/Aes-Xcbc
	Hashing (Phase2)AH	MD5/sha1/sha256//sha384/sha512/Aes-Xcbc
	DH groups(Phase1)	1/2/5/14/15/16/17/18/19/20/21/22/23/24/28/29/30

Load ShareFailover	PFS groups (Phase2)	On-off/1/2/5/14/15/16/17/18/19/20/21/22/23/24/28/29/30
	Local/Remote Network/identifier	yes/Local/Remote identifier- ANY/IP/FQDN, LOCAL- PEER (multi subnets)
	Peer GW	Yes- Domain dynamic and static IP
	NAT traversal	Yes
	Negotiation Mode	Main/Aggressive (like v2 modes)
	Site-to-Site VPN	Supports Site-to-Site VPN (to supports ANY remote network, Bypass localnetwork)
	VPN traffic Failover	Seamless switchover between two different types of connectivity Link fail on (packet loss, latency, jitter, delay)
	VPN traffic MANAGEMENT	Seamless switchover between two different types of connectivity (eg. Ethernet& LTE) (Internet-internet, Internet-MPLS, MPLS-MPLS) Same destination (traffic) VPN IPsec to load-share from multiple source linkon link availability Basic firewall/ACL/Supports firewall, MAC address black and white list management Supports IPsec VPN>site-to-site VPN, /remote VPN/dynamic VPN/VPN shift on link brownout and load-share
	Session-Based Load Balancing	NATed inspection of traffic and supports Session Persistence
	Packet-Based Load Balancing	Per-packet Load Distribution on multi-link
Load ShareFailover	Load balancing interface supportsPPPoE, DHCP,	the internet or LOCAL breakout traffic defined for a particular destination/ANY destination to be sharing load on multi-link (per packet/perflow) Load balance flows (sessions) to the same destination over multiple equal-costlinks.- active mode or active passive mode with failover
	ECMP load share	

Features	VRRP (Option)	Optional
	Static Route, Default Route, flap static route	ipv4 and IPv6
	Route	RIP v1 & v2, OSPF, BGP 3 (xx), ISIS,BFD, RIPng, OSPFv3, IS-ISv6, BGP4+ IPv6 ND
	SNMP	Supports V1, V2.
	LAN IP	Supports multi-LAN IP address, supports two IP address
		Optional, 802.11b/g/n; 300Mbps.
	Wi-Fi	Can be used as AP and client;
		Server Applications, wireless up to 50 PC users
	Firmware update	supports firmware update locally or remotely (centrally)
	Syslog	local and remote
	DHCP Server	Yes
	DNS, secure DNS	DNS proxy; and multiple secure DNS

Software	NTP	Real-time clock (NTP, supports update with defined hours);
	WAN, LAN	WAN/LAN/Memory statistics;
	Protocol	
	Protocols	TCP, UDP, SMTP, POP, ICMP, FTP, PPP, PPPoE, DHCP, DDNS, DNS Secure/Proxy DNS, WPS, DMZ,NAT, xDSL, NTP, QoS, etc.
	Network Protocols	IPv4/IPv6 supports
	IPv4 and IPv6	IPv4/IPv6 supports for routing and tunneling
	Layer-2	VLAN (802.1Q)
	Basic	
	QoS supports	Bandwidth Control (or) rate-limiting
	QoS	Traffic Shaping PING Traceroute NS lookup
	Diagnostics	Debug Supports access with user name & password. Supports access control base WAN/LAN interface Supports access control base source IP address
	Firewall	Defense DOS attack, supports SYN flooding, IP surfing, ping of Death, fragile, Supports PAP & CHAP Supports IP filtering Supports NAT/NAPT/Port forwarding/DMZ
	Security	Access Control List (ACL)
		Security (filter) MAC Filters

Advanced Firewall Features		State-full Packet Inspection (SPI) VPN Pass-through
Management	Certifications	RADIUS Client, CA etc.
	Remote Access	Web GUI (HTTPS) (or) SSHv2 CLI for remote management
	Zero Touch Provisioning	SNMP or MQTT, REST API
	EMS/NMS	Device supported in NIMBUS NMS for analytic and Management , snmpAND BASIC REST API
	Syslog	Log local/ upload to external syslog server
	Local or AAA (Radius)	
	Local Access	Easy to use and management: Web/Telnet/SSH/CLI, supports remote management

	WAN Link Health Check	Periodic WAN Link Health Check like ICMP, ping, TWAMP, packet loss, jitter, delay, signal strength etc.
	Bandwidth & Usage Statistics	The system shall support to display interface Bandwidth & user Usage Statistics - Mbps/Gbps
	Device Management	WEB interface (Internet Explorer v6 or Later; Mozilla Firefox v1.5 or Later, or other Java-enabled Browsers, Chrome, Opera, Safari)

It provides a dedicated Hardware Engine for Security Acceleration, Machine Learning and supports Packet Processing With multi-threaded Network Processor. These accelerators relieve the CPU for upper layer applications. The product is from one of the limited hardware and embedded design houses established in India focusing on indigenous design and committed to **Aatamnirbhar** and **“Make in India”** initiative