

EdgeMarc 2900e and 2900a

INTELLIGENT EDGE - ENTERPRISE SESSION BORDER CONTROLLERS



BENEFITS:

- Scalable configuration based on session license and field upgradeable as business need grows
- Combined deployment of EdgeView Service Control Center and EdgeMarc Intelligent Edge greatly reduces operational expenses and increases customer satisfaction
- Supports data rates up to 1 Gb/s
- Available as a VM for KVM, VMware and Hyper-V

Deploying voice communications over the Internet can create quality and security issues that do not normally exist with traditional phone systems. To overcome these issues, Intelligent Edges are deployed on the customer network edge to ensure successful VoIP implementations. VoIP service providers deploy an Intelligent Edge in the form of an enterprise session border controller (ESBC) to improve voice quality and visibility into the customer environment, supporting both SIP trunking and hosted unified communications.

Edgewater Networks' EdgeMarc 2900e Intelligent Edge is ideally suited for Hosted PBX or SIP Trunking applications that do not require analog lines. The solution supports bi-directional data rates up to 1Gbps and up to 300 concurrent calls.

The EdgeMarc 2900a brings the same functionality of the EdgeMarc 2900e while adding support for FXS and FXO connections for fax lines, overhead paging systems or PSTN lifeline.

EdgeMarc Intelligent Edges scale according to user demands, allowing service providers to deliver high quality VoIP solutions to customers of all sizes and network configurations.

DEVICE SPECIFICATIONS:

	EdgeMarc 2900e	EdgeMarc 2900a
Ports		
WAN 1Gb/s Ethernet (RJ-45)	2	2
Optical WAN 1 Gb/s ports (SFP)	2	2
LAN 1 Gb/s Ethernet (RJ-45)	4	4
FXO (RJ-11)	0	2
FXS (RJ-11)	0	6
Micro SD (SDXC) slot	1	1
Console (RJ-45)	1	1

About Edgewater Networks

Founded in October 2002, Edgewater Networks is a market leader in enabling IP-based voice, video and data services. Service providers and enterprises of all sizes use Edgewater Networks solutions to simplify customer premise configurations for quick and smooth installations, reduce time to market and deliver rapid return on invested capital. The company helps customers deliver intelligence at the network edge with its Network Edge Orchestration platform that includes the EdgeView Service Control Center, EdgeMarc Intelligent Edges and QuickConnect certification program.

To learn more, please visit www.edgewaternetworks.com or call (844) 405-3550. Follow us on Twitter at @ewn_inc.

Features and Capabilities	Specifications
Performance	
Maximum data throughput	1Gb/s
Maximum sessions, voice only	300
Maximum number of registered devices (endpoints)	2000
Cloud2Edge Complete Compatible	Yes. See www.edgewaternetworks.com/products-services/cloud2edgecomplete for more details
Analog Port Features (2900a only)	
FXO Port	Loop start, Far end disconnect supervision, Battery reversal, RTP silence detection
FXS Port	<ul style="list-style-type: none"> Loop Start Ringer Equivalency Number (REN) - 5/port, 20/system Ringing voltage >= 48Vrms 20Hz, selectable impedance 48v on hook voltage, 24mA off-hook current
SIP Features	
Network Address Translation	<ul style="list-style-type: none"> Network Address Translation (NAT): static, dynamic Port Address Translation (PAT) (provides topology hiding of hosts on the LAN)
Back-to-Back User Agent	Yes
Application Layer Gateway (SIP proxy)	Yes
Proxy Modes	<ul style="list-style-type: none"> Transparent proxy mode Multi-homed proxy mode
SIP Registration Pacing	Registration rates (LAN-side/WAN side) can be controlled
VoIP Test Call Agent	Remotely verify and troubleshoot connectivity
Header Manipulation	Full control to add/delete/modify SIP headers
Signaling Protocol (LAN/WAN)	UDP, TCP, TLS
Media Protocol (LAN/WAN)	RTP, SRTP
SIP Standards Compliance (primary standards)	<ul style="list-style-type: none"> RFC 3261 RFC 2327 RFC 3263 RFC 2833
Codecs	G.711, G.722, G.726 G.729
Fax	T.38 support for FXS interfaces
Security	
Firewall	Stateful, VoIP aware firewall
Denial of Service protection	SYN flood, UDP flood, ICMP flood, Fragment flood
Encryption and Authentication	TLS, SRTP, HTTPS, SSH, Radius
Encryption protocols supported	3DES, AES, SHA-256, MD-5
Key Management	IKE key management, IPsec
Proxy ARP	Yes
IPsec VPN	Yes (max 12 tunnels)
PPTP support	MSCHAP, MSCHAP V2, MSCHAP+MPPE
Voice Quality Measurement	
Per call statistics (LAN/WAN)	Full MOS support (including Jitter, Packet Loss)
Mean Opinion Score (MOS)	MOS tabulated every 10 seconds of every call on both WAN and LAN side of call leg.
Traffic Management/Routing/QoS	
Routing	<ul style="list-style-type: none"> BGP - fully functional BGP stack supporting Layer 2/3 IP WAN solutions (MPLS) RIP OSPF PPPoE Secondary address / Subinterface
Multicast	Protocol Independent Multicast - sparse mode (PIM-SM)
Traffic prioritization	<ul style="list-style-type: none"> Class-based queueing (up to 8) Prioritization on IP and port Prioritization on VoIP protocol Traffic Shaping Call Admission Control Upstream, downstream bandwidth management
DHCP server	Yes
QoS	Diffserv (DSCP), IP Precedence, policing
VLANs	<ul style="list-style-type: none"> 802.1Q (up to 16) Multi-VLAN ALG support
Network addressing	IPv4, IPv6

Features and Capabilities	Specifications
System Management	
Device Management	CLI, (SSH, Telnet) Web GUI (HTTP, HTTPS)
Remote upgrades, back-up, restore	TFTP, FTP, SCP, HTTP, HTTPS
Firmware	Dual local firmware image for upgrade and recovery
Network Management	SNMP v1, v3
Message Analytics	System monitoring and SIP statistics
Debug tools	Packet capture (tcpdump), traceroute, ping, syslog
Endpoint monitoring	Two-way Active Monitoring Protocol (TWAMP)
Edge Orchestration	EdgeView Service Control Center for device and endpoint management
EdgeView key functions	<ul style="list-style-type: none"> • Remote troubleshooting • Proactive management • Inventory management • Configuration management • Reporting and data analytics (for more information, please see: www.edgewaternetworks.com/products-services/edgeview/)
Hardware Specifications	
Dimensions (W x D x H)	9.21" x 6.54" x 1.75"
Weight	2 lbs.
Mounting Options	Wall Mount, Rack Mountable
MTBF	269,532 hours
Operating Temperature	0-40 deg. Celsius
Operating Relative Humidity	4% to 90% (non-condensing)
Compliance	RoHS 2.0, UL/cUL, CB, FCC part 15, FCC part 68, IC, CE, RCM and VCCI
Power	Wall mount - 2900e: DC-12V 1.66A 20W, 2900a: DC-12V 3A 36W
Hardware Warranty	5 years
Software support and maintenance	First year included