



EdgeMarc 4300T Converged Network Appliance

AT A GLANCE

- T1 CSU/DSU or 10/100 Mbps Ethernet WAN
- Quality of Service: prioritization, traffic shaping, DiffServ support
- Passive call quality monitoring (MOS, jitter, packet loss, etc.)
- Stateful packet inspection firewall
- Integrated 4 port managed VLAN switch
- IPSEC VPN hardware accelerator
- Multi-protocol VoIP application layer gateway (SIP)

The NEC EdgeMarc 4300T combines multiple voice and data features into a single, easy to use converged networking router. It includes a single T1 WAN interface or a single Ethernet WAN, a 4 port managed VLAN switch.

The NEC EdgeMarc 4300T offers an intelligent, all in one networking and monitoring solution for NEC key system deployments.

Feature Rich, Simple to Use - Key Features

- Single T1 integrated CSU/DSU
- Integrated 4 port managed Ethernet switch with VLAN support
- VoIP-aware VPN/Firewall
- VoIP application layer gateway (SIP) resolves NAT/Firewall traversal issues
- QoS: priority queuing, traffic shaping, diffserv marking/policing
- Passive call quality monitoring (MOS, jitter, latency and more)
- DHCP server
- NAT/PAT
- Management: HTTP, HTTPS, SSH, Telnet, SNMPv1 and V3

All-in-one Solution

One box for your data router, Ethernet switch, firewall, VoIP ALG – with a single management interface.

Quality of Service

Packet prioritization and data traffic shaping for VoIP calls.

Simplified troubleshooting

MOS statistics, call monitoring, LAN/WAN problem isolation from the router, TCPdump, ping, Traceroute and more.

Security

Stateful packet inspection firewall, “media-aware” ALG security, IPSec.

Carrier-grade, yet built for business

Businesses can benefit from a tried and tested platform designed for large scale service provider deployments.



Specifications

Interfaces	
T1 WAN	1
Framing	ESF/D4
Line coding	B8ZS/AMI
Line Build Out	0, -7.5, -15db
Connector	RJ45
PPP	Yes
Frame Relay	Yes
HDLC/cHDLC	Yes
Ethernet WAN	1

Interfaces	
Autosensing	Yes
10/100 Mbps	Yes
Duplex	Full or half
Ethernet LAN	4
Autosensing	Yes
10/100 Mbps	Yes
Duplex	Full or half
Managed VLAN	Yes
Loop Start	Yes

Interfaces	
USB ports	2
Console	
Connector	DB9 Male

Power and Dimensions	
Power Supply (AC) - external brick	12V, 3.0A
Dimensions	1.7"/10"/7"
Weight	2 lbs.

Certifications	
UL, CE, FCC Part 68 & 15, Industry Canada	Yes

System Services	
DHCP server	Yes
Local TFTP/FTP server	Yes
Automatic TFTP/FTP download on restart	Yes

Security	
Stateful packet inspection firewall	Yes
VoIP protocol aware firewall	Yes
Dynamic network address translation	Yes
Static network address translation	Yes
Port address translation	Yes
Denial of Service protection - SYN flood	Yes
Denial of Service protection - UDP flood	Yes
Denial of Service protection - ICMP flood	Yes
Denial of Service protection - Fragment flood	Yes
IPSec	Yes
IKE key management	Yes
3DES	Yes
AES	Yes
SHA-1	Yes
MD-5	Yes
IPSec Hardware acceleration	Yes
Number of tunnels	Up to 15

Traffic Management/QoS/Routing	
Class-based queuing	Yes
Prioritization on IP	Yes
Prioritization on VoIP Protocol	Yes
Traffic shaping	Yes
Guaranteed bandwidth	Yes
Upstream bandwidth management	Yes
Downstream bandwidth management	Yes
VoIP call admission control	Yes
Diffserv marking	Yes
Diffserv policing	Yes
IP routing	Yes
Secondary address/subinterface support	Yes
VLAN - 802.1Q	Up to 16

Passive Call Quality Monitoring	
Per call statistics	Yes
LAN side measurements	Yes
WAN side measurements	Yes
Mean Opinion Score (MOS)	Yes
Bad MOS score alarms	Yes
Below threshold MOS counters	Yes
Degradation in MOS due to network impairments	Yes
Jitter	Yes
Packet loss	Yes
Consecutive lost packets	Yes
Total # of RTP packets received	Yes
Sum of received & expected packets	Yes
Out of sequence packets	Yes
Average packet loss burst length	Yes
Estimated jitter buffer delay	Yes
Estimated jitter buffer packet discard rate	Yes
Probability that degradation is due to LAN congestion	Yes
Probability that degradation is due to Router congestion	Yes