

EN-4000™

Dual Module with WIFI



EN-2000™ Standard Features

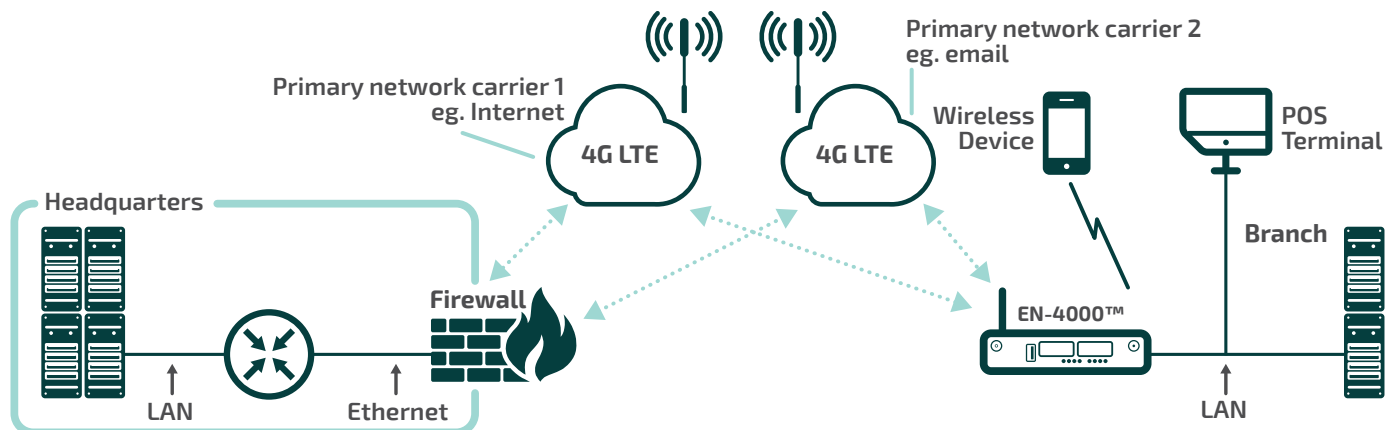
- Dual wireless carrier support for 4G LTE and HSPA+
- Industrial-hardened, with optional redundant power sources: AC, DC, or Power over Ethernet (Standard AC PSU)
- Provides service over any port, any network at anytime IP/MPLS, Cellular 3G, 4G LTE, 802.11 WiFi, Frame Relay, circuit switched, T-1, Serial, Ethernet, optical fiber, analog modem
- Business Continuity
- Automatic Failover with traffic load sharing between wireline and wireless links
- Embedded 802.11b,g,n Wi-Fi
- VPN IP Security (IPSec) AES 256 and 3DES, SSL/TLS and SSH
- Selective Layer Encryption (Patented) for satellite VPN optimization
- Operation, Administration, and Management (OA&M) with Web based GUI management

4G LTE/HSPA+ Broadband Router

The EN-4000™ router family adds speed, capacity, and flexibility to the Encore Networks' series of wireline/wireless routers. This compact IP + Legacy router is designed for commercial and industrial environments and a wide range of operating temperatures, the all-metal enclosure resists dust, moisture, and electromagnetic interference (EMI). The single-box solution provides Internet Protocol (IP), VPN, Firewall, Ethernet Switching, and Legacy Protocol to IP interworking.

The EN-4000™ supports a wide range of services and applications used for M2M, SCADA, Smart Grid, and Enterprise applications. The base configuration contains one or two cellular modules, an 802.11 Wi-Fi module, and five Ethernet ports. Three expansion slots, two in the front and one internal, accept optional hardware modules. Expansion slots enhance flexibility and let the EN-4000™ router adapt easily to specific user needs by adding additional Ethernet ports (up to nine total), dual 3G and 4G cellular modules, encryption hardware, DSP, T-1/E-1 CSU interfaces, fiber optical links, 802.11 Wi-Fi, a dial modem with an FXS analog telephone interface, and serial data ports.

The EN-4000™ router supports multiple ports and high-speed network connections, performing routing and switching of network packets, and Layer 4 Firewall with enhanced cyber and physical security measures. The internal Ethernet switch, in addition to routing features, allows the EN-4000™ router to assign ports to different networks (wired or wireless) and functions (SCADA vs. video for example). Multiple WAN connections load share or apply enhanced traffic grooming using QoS and CoS traffic types assigned to specific links. Upon a link failure, traffic moves automatically to a working link or to a new connection as programmed.



Load-balanced Rapid Deployment Internet
 Dual module with dual concurrent 4G network connections (e.g. Vodafone and EE)

Technical Specifications

General Features

Protocol management and translation of legacy industry serial protocols
 SNMPv3
 SSH, Telnet, and web access interface
 SNMPv3 manageability (monitor and configure)
 Access for control via SSH, Telnet, and web access interface
 Up to four antennas - 3G/4G LTE cellular, 802.11 Wi-Fi, and GPS services.
 Three slots for optional interface modules
 Configuration servers to manage and update routers centrally
 Disaster Recovery and Traffic Load Sharing over WAN connections
 QoS enforcement to prioritize critical traffic
 Redundant power sources

Security Appliance Features

Stateful inspection firewall
 IEEE 802.11i (WPA2, RSN)
 DMZ LAN port
 NAT (Network Address Translation)
 SSL/TLS
 SSH (Secure Shell)
 IP Sec (RFC 2401) with AES 256 and 3DES
 Generic Router Encapsulation GRE (RFC 1701)
 Internet Key Exchange--IKE (RFC-2409)
 RADIUS authentication

Transport Protocols

WAN
 IP over Ethernet (compatible with MPLS services)
 Frame Relay (RFC-1490, IP over FR)
 T-1 or E-1 CSU, full or fractional
 Asynchronous PPP
 Synchronous PPP
 X.25
 MLPPP
 PPPoE
 Selective Layer Encryption (SLE) for VPN Optimization (patented)
 IP
 IP Versions 4 and 6
 IP Routing (RIP v1/v2), OSPF, BGP, or static routing
 DHCP client/server/BootP/Relay
 IP QoS and traffic prioritization
 IP fragmentation/reassembly
 IP routing over VPN; TCP and UDP
 802.1q VLAN tagging
 Virtual Redundant Routing Protocol (VRRP) between two routers
 Dead Peer Detection

Serial Data Support

Up to 4 serial ports supporting V.35, EIA/TIA RS-485, RS-232, RS-422
 Legacy Protocol support for DNP3, IEC 60870-5-101/103/104 MODBUS, CDC, S/NET, CONITEL, ABB,
 X.25, ALC, and most industry proprietary protocols.
 Inquire about additional protocols.

Part Code

NUC-EN4000-DM-WIFI
 Description: Encore EN-4000 Dual SIM, Dual Module 4G Router inc WiFi