4G LTE BROADBAND ROUTER

The Encore Networks EN-2000™ is a high performance low-cost broadband router designed for LTE Cellular networks. Built for the Internet of Things, this compact IP M2M router provides license free IPsec, VPN, Firewall, Ethernet and IP interworking. The EN-2000™ can service the needs of mission critical business and enterprise applications.

The EN-2000™ supports high-availability in fixed or portable locations by supplementing traditional broadband networks like DSL, cable, or MPLS/Ethernet with a high-speed LTE connection. With Dual SIM support, the EN-2000™ can support dual connections to two different carriers. This gives the EN-2000™ the ability to switch automatically between carriers based upon cell signal strength, data plan threshold crossing alert and more. When programmed for failover, the EN-2000™ detects hardwire network failures and seamlessly switches to LTE as programmed, keeping the network online. With standards based VRRP, the EN-2000™ can support automatic failover and failback when the original connection comes back online. The EN-2000™ M2M router provides multiple VPN tunnels and VLAN support as well as VRRP with no additional licensing fees. It can also be set up to broadcast traffic to multiple operation centers using traffic shaping ensuring maximum performance, while also reporting alarms to a NOC.

The EN-2000™ can also operate as a stand-alone cellular solution to support a branch office or location. With the high speeds offered by cellular LTE networks normal business can be conducted without terrestrial connections. This makes the EN-2000™ an ideal choice for new construction, temporary branch offices or primary internet while awaiting terrestrial installation. The EN-2000™ can be enabled with optional WiFi which can be used to further enhance the local network.

Exceptional Features at a Reasonable Price

The EN™ series of cellular routers provides powerful features at a value price. The EN-2000™ is the flagship of this series and offers exceptional value. All the EN™ series routers come with a three-year hardware warranty, an intuitive GUI interface, built in Firewall, VPN support and advanced IP features including DMNR, GRE, and IPsec.

In addition, all of the EN™ Series routers can be monitored and managed with Encore’s enterprise management system enCloud™. enCloud™ offers many features that will make managing your entire network of EN™ Series routers easier, including Cellular data limit enforcement for individual devices and group data plans, included firmware updates, no touch deployment for new hardware, and reseller and customer tiers to assist in delivering managed network services for multiple customers.
# TECHNICAL SPECIFICATIONS

## GENERAL FEATURES
- Broadband Router
- Secure VPN router
- Dual SIM
- Modem/Cellular IP Pass Through/Bridge Operation
- QoS enforcement to prioritize critical traffic

## SECURITY APPLIANCE FEATURES
- Stateful inspection layer 4 firewall, NAT, NAT Port Forwarding
- HTTPS-SSL
- SSH (Secure Shell)
- IPSec with AES 256 and 3DES - 4 tunnels max
- Dead Peer Detection plus NAT Traversal
- Generic Router Encapsulation GRE (RFC 1701)
- Internet Key Exchange - IKE V1, V2
- OpenVPN

## IP TRANSPORT PROTOCOLS
- Static routing
- DHCP client/server
- IP QoS and traffic prioritization
- IP fragmentation/reassembly
- IP routing over VPN, TCP and UDP
- IPv6 Support
- Virtual Redundant Routing Protocol (VRRP)
- Asynchronous PPP
- DMNR
- PPoE

## CELLULAR
- LTE CAT 4, Bands: 800/900/1800/2100/2600 Mhz
- GSM TECHNOLOGY/BANDS
- UMTS/HSPA Triple-band 900/1900/2100 Mhz
- EDGE/GPRS Dual-band 900/1800 Mhz
- Dual SIM Programmable Switch Over
  - No SIM Detection
  - Low Cell Signal
  - Data Plan Threshold Crossing Alert
  - Unable To Connect To The Network
  - Switches To Roaming

## WIFI
- Support for 2.4 and 5 Ghz
- Autoselect between 802.11a/b/g/n
- WEP or WPA-PSK encryption
- WiFi Hotspot

## PHYSICAL FEATURES
- LEDs for cell module, system status, network status, and power
- LEDs for LAN/WAN and Cellular signal strength indication
- One 10/100 Mbit/s Ethernet RJ-45 (WAN/LAN) - WAN is factory default
- One 10/100 Mbit/s Ethernet RJ-45 (LAN)
- Reset Switch
- Two SMA antenna connections for embedded internal cellular radio
- Two SMA antenna connections for detachable WiFi antennas
- Two Accessible SIM Slots
- Power Input
- Optional DIN Rail Mounting
- Model Specific RS-232, RS-483 connections

## MANAGEMENT
- encloud™ Enterprise Management System
- GUI Web Management
- SSH (Secure Shell)
- SNMPv3 manageability
- HTTP/HTTPS - web access interface
- Telnet Syslog

## MECHANICAL
- Height: 1.6 inches/40 mm
- Width: 5.7 inches/145 mm
- Depth: 4 inches/100 mm
- Weight: 1 lb. (0.45 kg)

## ENVIRONMENTAL
- Operating: -20 C to +70 C (Extended Temperature Commercial)
- Storage: -40 C to +85 C
- Humidity: 5% to 95%, non-condensing

## STANDARDS COMPLIANCE
- RoHS Compliant
- CE Compliant
- EMC, FCC Part 15, EN 55011/CISPR II
- 100 - 240VAC Autoranging, 47-63Hz Power Supply (12V input)
- Power Consumption - 3.5 watts nominal, 7 watts transmitting

## PRODUCT SAFETY
- UL/CSA 60950-1, EN 60950-1
- CAN/CSA-C22.2 No. 60950-1-03

Specifications subject to change without notice

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