ENCORE NETWORKS

C2C-E2C™ Data Sheet

The C2C™ solution is a one-to-one replacement of existing hardwired connections

- M2M Applications
- Banking
- Industrial Controls
- Utilities, Meters, and RTUs
- Oil and Gas
- Medical
- Transportation
- Security / Fire Alarm
- Point-of-Sale
- Vending Kiosks
- Elevators
- Traffic Control

C2C
copper to cellular

Ethernet Over Low-Cost Cellular

The C2C-E2C™ provides the Ethernet connectivity functions of a wireline network with more flexibility, better management, and lower cost by substituting a cellular data service for the wires. As a member of the BANDIT™ (Broadband Access Network Device for Intelligent Termination™) family of products, the C2C-E2C™ is a commercial grade M2M (machine-to-machine) appliance that includes an IP router, firewall, encryption, and VPN features integrated with an embedded 2G/3G cellular radio.

Leased data lines, DSL, and Plain Old Telephone Service (POTS) lines have begun to exhibit diminishing reliability and increasing costs. The optimal choice of successor is cellular data which has the same capacity at a lower price.

Faster T-1 lines that are not used to full capacity are also candidates for replacement by C2C-E2C™ and a higher-volume cellular data plan. In most areas the 3G services will deliver up to 600 kbit/s on a sustained transmission. Applications such as video signage and real-time monitoring may fall in this category.

Key benefits of the C2C-E2C™ with cellular service include:
- Protection of existing capital investments--no changes required in equipment.
- Compatibility with private and public IP networks.
- Reduced OpEx from lower-cost data plan that replaces monthly recurring charges for land lines.
- Security of Virtual Private Network (VPN) connection, encryption, firewall, and access lists.
- Standards-based remote management.

Simple and easy to use, the C2C-E2C™ connects remote equipment with no changes to its configuration or function. Such equipment under Operations Administration and Maintenance (OA&M) continues to respond as if connected to a broadband terrestrial circuit. Management of the C2C-E2C™ itself uses SNMP traps (alarms) and commands, making it compatible with nPhase management systems. Control is also offered via Telnet sessions (local or remote).

Data security utilizes SSL or IPsec VPN technology. Encryption may be configured as triple DES (3DES) or AES (with a 256 bit key). Each device contains an IP firewall and a Syslog file that records significant events such as hacking attempts.

The host site diversification feature is ideal for disaster recovery as it fails over to a backup data center. It may also be configured for load sharing to multiple host sites.

Network Diagram
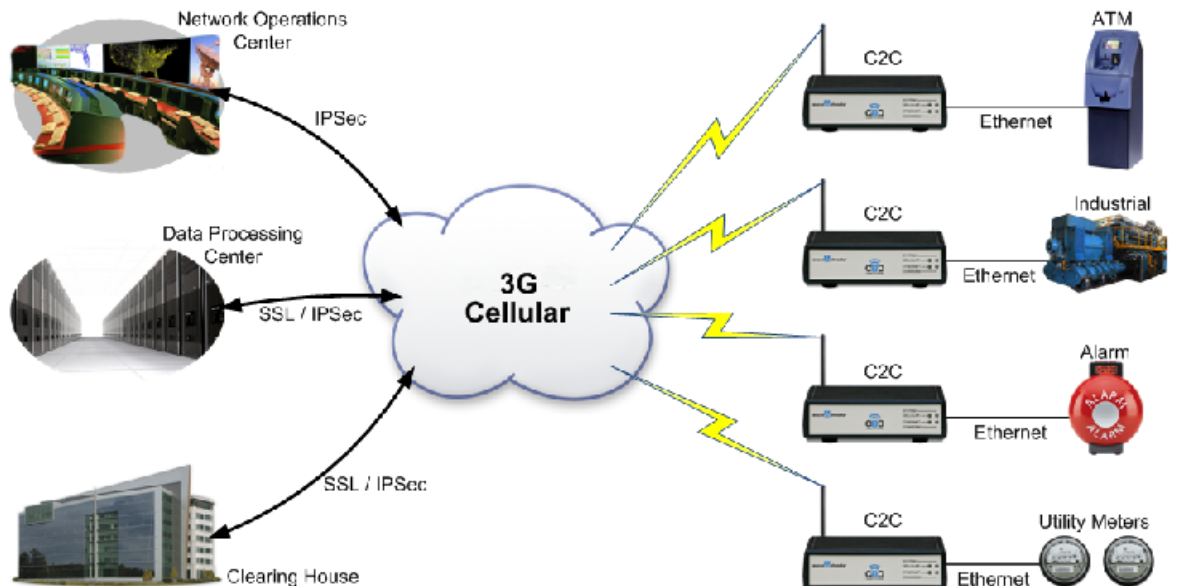
Technical Specifications

Physical Interfaces
  WAN/LAN Connectivity:
   • One 10/100 Ethernet w/ Auto Failover

Connectivity
  IP- Ethernet
   • TCP Data Transport
   • Telnet (Client or Server)
   • TCP Port configuration
   • TCP Broadcast
  Wireless - Embedded
   • Integrated Wireless modem supports
     2G/3G Wireless Cellular data
     networks
   • 1 External Antenna / 1 Internal
     Diversity Antenna (3G only)

Security
   • SSL
   • IPSec
   • Standard Encryption 3DES/AES
   • IP Authentication
   • Call setup authentication
   • Unit Authentication
   • User Passwords
   • Firewall
   • Physical Port Security
   • Intrusion Detection Tracker

System Features
   • SNMP Alarms / Traps
   • Password Security
   • User Friendly interface
   • Alarm Reports
   • Syslog

Network Support
   • IP Wireless
   • Cellular Data
   • IP Satellite
   • IP Terrestrial
   • Private or Public Networks

Management
   • Manageable via SNMP
   • Remote or Local Access
   • Telnet

Electrical Specifications
  Power Supply Options:
   • 7.5 watt maximum with embedded
     cellular modem
   • **AC:** 100-240VAC, 50-60Hz (with
     external adapter)
   • **DC:** 5, 12, 24, 48 VDC Options

Environmental
  Environment:
   • Temperature: 0° C to +50° C
  Mechanical:
   • Height: 1.2 in. (3.05 cm)
   • Width: 4.3 in. (10.92 cm)
   • Depth: 2.8 in. (7.11 cm)
   • Weight: Less than 1 lb. (< 0.45 kg)
   • Installation Type: Desktop/Shelf
  Standards Compliance:
   • RoHS Compliant
   • PCI Compliant
   • Product Safety
      - UL/CSA 60950-1
      - CAN/CSA-C22.2 No. 60950-1-03
      - EN 60950-1
   • EMC
      - FCC Part 15
      - EN 55022: 1998
      - EN 55024: 1998

(Specifications Subject to Change without Notice)

C2C™ - Available in Both Ethernet Only and Ethernet/Analog Modem Models

Front

Back
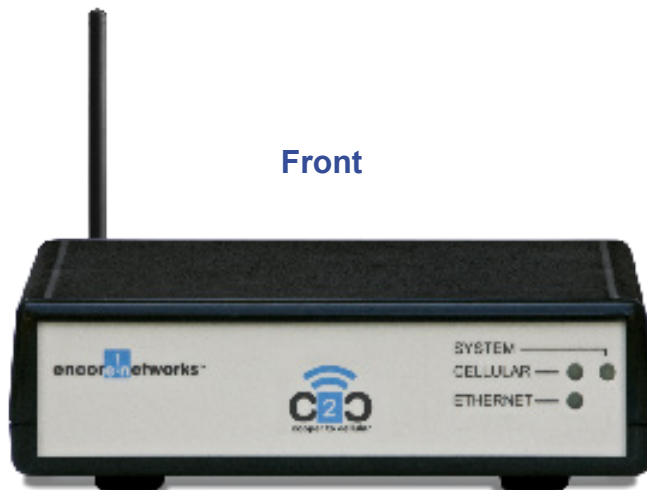
Encore Networks, Inc.
3800 Concorde Parkway | Suite #1500 | Chantilly, VA 20151 | Phone: 703-318-4325
Email: sales@encorenetworks.com | Web: www.encorenetworks.com

Data_Sheet_C2C-E2C_030912.pdf