



## Managed Ethernet extender over coaxial cable (CO/CPE modem)

# EOC-20, EOC-21

The EOC-20/21 is a point-to-multipoint EoCNA (Ethernet over Coax Network Alliance) solution that efficiently extends 10/100 Ethernet circuits up to 900 meters (2,952feet) at full Fast Ethernet speed using existing coaxial cable. The EOC-20 is a master unit which acts as a bridge and distributes bandwidth to up to 32 EOC-21 subscriber units in a fashion similar to time division multiplexing. The EOC-21 is actually where all the packet processing takes place. At the heart of this device is a 6 port L2/3/4 switching gateway controller. By placing all the management in the cpe units, Multi-Service Operators can guarantee that no single client will be able to hog all of the EoCNA bandwidth and effect other customer's service. This allows deployment of triple-play applications where quality of service must be maintained. The EOC-20/21 works by sharing the same cable with CATV signals, without interference to the existing CATV signals.

### Features

- Extends LAN connectivity using existing coaxial cable
- Transmits CATV and Ethernet over the same coaxial cable
- Supports VLAN tag and port, QoS, bandwidth control, auto-provisioning via TFTP
- Supports Web, Telnet and SNMP management
- Two (2) Ethernet ports, one for STB (Set Top Box), one for LAN
- 112Mbps @ 900 meters (2,952feet) reach
- 32Mbps @ 1.2Km (4,000feet)
- Supports point to point and point to multi-point with up to 32 nodes over tap/splitter
- Asymmetrical using EoCNA standard
- Operates transparently to high layer protocols such as TCP/IP
- Auto MDI / MDIX
- Auto negotiation
- Status LEDs for simple monitoring

### Interface

Fast Ethernet Interface 10/100 Mbps, RJ45  
Coax Interface Two F-Type Female Coax Connectors  
One for EoCNA · the other for TV  
Protocol Transparent to higher layer protocols  
Transmission Power  $8 \pm 1$  dBm, 12-28 MHz  
and Spectrum

### Quality of Service

Physical layer transmission speed and distance  
160Mbps maximum speed  
Up to 112Mbps @ 900 meters  
Up to 32Mbps @ 1.2Km (-176dBm/Hz Noise Floor)

### Management

Priority Based on IEEE802.1p and TCP/UDP port  
Priority Based on 802.1Q Tag  
Guaranteed QoS based on Layer II Parameterized QoS  
Diagnostic EoCNA function  
Secured/Isolated Communication between devices  
Provision/Denial of Service  
CPE profile download provision & SNMP  
read/write & Web Manager setting  
DHCP snooping  
DHCP Option 82 support  
DHCP session manager  
NetBIOS filtering  
ARP support

### Indications

Port Rate limit function for HCNA port or Port Based  
EOC20: PWR, LAN Link/Act, STB Link/Act,  
Coax Link/Act, Coax Sync  
EOC21: PWR, Alarm, Sys, LAN Link/Act,  
STB Link/Act, Coax Link/Act, Coax Sync

### Standard

ITU G.9954, IEEE802.3, IEEE802.3u, IEEE802.3x,  
IEEE802.1Q, IEEE802.1p, IGMPv1/v2

### Power Input

5VDC (via AC switching adapter)

### Power Consumption

6W

### Dimensions

83 x 138 x28mm (D x W x H)

### Weight

330g

### Temperature

0-50°C (Operating), -10-70°C (Storage)

### Humidity

10-90% non-condensing

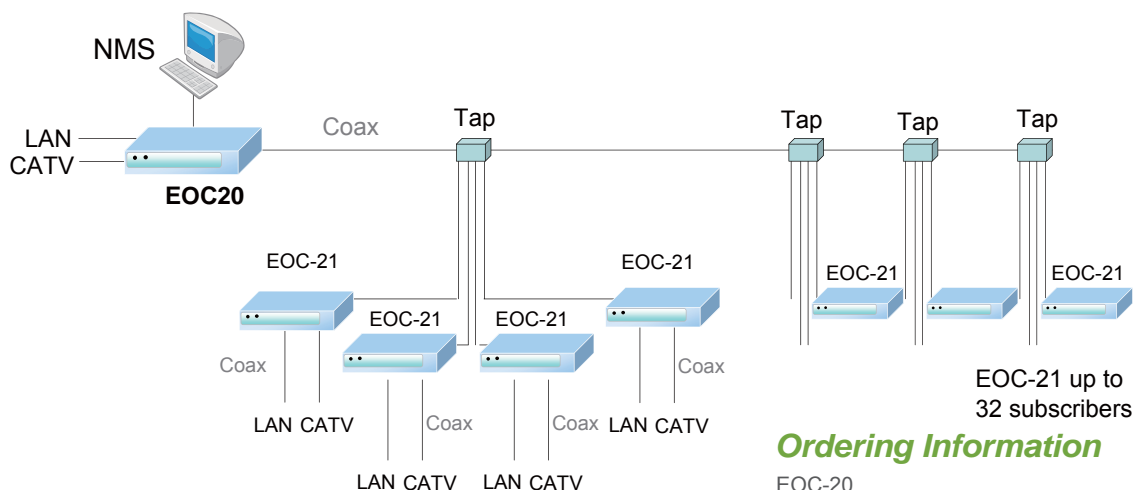
### Certification

CE, FCC, RoHS

### MTBF

35,000 hrs (25°C)

### Ethernet / CATV over Coax application



### Ordering Information

EOC-20  
EOC-21