

COMMSCOPE E6000

CONVERGED EDGE ROUTER (CER)

Die E6000 ist ein Next-Generation CCAP-Plattform, die sich durch eine extreme Kanal-Dichte, Energie-Effizienz sowie vielseitige Einsatz- und Redundanz-Möglichkeiten auszeichnet. Das Betriebssystem stellt eine Weiterentwicklung von jenem der ARRIS C4-CMTS-Plattform dar, welches sich viele Jahre durch höchste Stabilität selbst im groß-skalierten Einsatz bestens bewährt hat. Viele erprobte Features wie zB. IPv6 wurden dabei in das E6000-Betriebssystem integriert.



- MPLS L2 VPN
- MPLS L3 VPN
- Hitless Bonded Modem Load Balancing über Dynamic Bonding Change (DBC)
- Hitless Bonded Modem Movement über DBC ausgelöst über CLI
- Intelligentes TCS Assignment/Balancing
- Intelligentes RCS Assignment/Balancing Control
- Upstream Channel Bonding mit bis zu 8 Kanälen in der Bonding-Gruppe
- Unterstützt Rückweg von 5 bis 85 MHz
- Möglichkeit Rückwege über Connector Groups zuzuweisen
- IPv6-erweiterte ACLs
- IPv4 /31 Subnet Support bei NSI
- IPv6 /127 Prefix Support bei NSI
- Vorkehrungen für Lawful Intercept
- TCS Reduction Enhancement
- Einfügen von Flap-Lists
- Partial Service Enhancement
- SAI/TAI Support for MPLS L2 VPN
- ARP/ND Reduction

RF DOWNSTREAM	
Frequency Range (MHz) Gen 1 DCAM	57 to 999 (DOCSIS 3.0) 90 to 1002 (EuroDOCSIS 3.0)
Frequency Range (MHz) DCAM 2	108 to 1218
RF Output Level (dBmV)	25 to 60 (SC-QAMs)
Typical Modulation Error Ratio (MER) (dB)	47
Modulation (QAM)	64, 256, DOCSIS 3.1
Data Rate (Mbps) (Max.)	30.34 to 55.62 per channel (SC-QAMs)
Output (load) impedance (Ohms)	75
PHYSICAL	
Power (Gen 1)	-48 VDC (40 to 72 VDC)
Power (Gen 2)	-48 VDC (44 to 72 VDC)
Power Consumption (full fill Gen 1 system)	3,800 W nominal at 48 VDC, 77 F (25 C)
Power Consumption (full fill Gen 2 system)	5,800 W nominal at 48 VDC, 77 F (25 C)
Operating Temperature:	
Short Term F (°C)	+23 to +131 (5 to +50)
Long Term F (°C)	+41 to +104 (+5 to +40)
Storage Temperature F (°C)	-40 to +158 (40 to +70)
Operating Humidity (Min. Max.)	5 to 85% (Non condensing)
Dimensions (H x W x D) in. (cm)	28 x 17.4 x 32.5 (72.0 x 44.2 x 82.6)
Weight lbs. (kg) (full fill system)	Approx. 235 (107)

RF UPSTREAM	
Frequency Range (MHz)	5 to 85 (UCAM) 5 to 204 (UCAM 2)
SC-QAM Modulation	QPSK, 16 QAM, 32 QAM, 64 QAM
Channel Type	OFDMA (UCAM 2), TDMA, ATDMA, TDMA/ATDMA
Data Rate (Mbps) (Max.)	30.72 per channel (ATDMA)
RF Input Level (dBmV)	-16 to +29
Frequency Resolution (kHz)	< 1
Symbol Rate (Ksym/sec)	1280, 2560, 5120
Bandwidth per SC QAM (MHz)	1.6, 3.2, 6.4
MANAGEMENT AND NSI INTERFACES	
Management Interfaces (Gen 1)	10/100/1000 Mbps Ethernet (RJ-45) plus Console (serial port, RJ45)
Management Interfaces (Gen 2)	100/1000 Mbps Ethernet (RJ 45) plus Console (serial port, RJ45)
Network-side Interfaces (Gen 1)	10 Gigabit Ethernet (SFP+) auto baud, eight per card
Network side Interfaces (Gen 2)	100 Gigabit Ethernet (QSFP-28), three per slot; 10 Gigabit Ethernet (SFP+), ten per slot
MANAGEMENT ACCESS	
In band Management with Access Control Lists via any NSI port	
Out of Band Management via dedicated Ethernet port on RPIC and RPIC-2Q	
Console (serial) port on RPIC and RPIC-2Q	

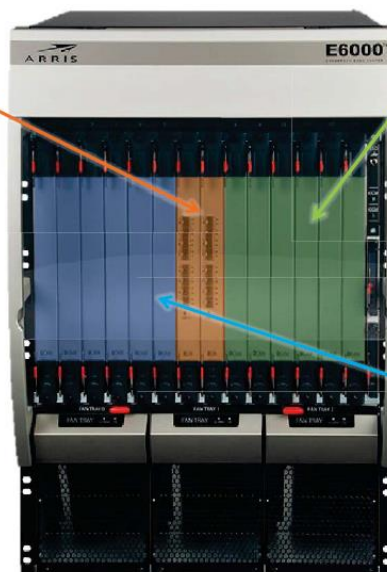
Erhältliche Module:

- Downstream Cable Access Module 1 (DCAM-1)
- Upstream Cable Access Module 1 (UCAM-1)
- Downstream Cable Access Module 2 (DCAM-2)
- Upstream Cable Access Module 2 (UCAM-2)
- Router System Module 2 (RSM-2)
- 10G EPON Fiber Module (EPFM)
- E6000n Remote-PHY-Gerät (RPD)

E6000 CER VORDERSEITE

Router System Module (RSM-2)

- Network-side interfaces off the front
- Packet switching for all CER traffic
- System control of chassis and user interfaces
- 1:1 redundancy for high availability
- 3 Hundred-Gigabit ports (QSFP) and 10 Ten-Gigabit Ethernet ports (SFP+)



Downstream CAM (DCAM-2)

- 16 DS-SG
- Full spectrum per SG (5x 192MHz) (48 QAMs and 192 MHz OFDM per MCX in R5.0 SW)
- Hitless sparing up to 7+1
- RF output spans from 108 MHz to 1.2 GHz

Upstream CAM (UCAM-2)

- 24 US-SG
- 12 QAM and 2 OFDMA receivers per SG (licensed from min. of 48)
- Each receiver capable of 5-204 MHz operation (5-85 MHz in R5.0)
- Hitless sparing up to 6+1 (5+1 in R5.0 software)

E6000 CER RÜCKSEITE

