

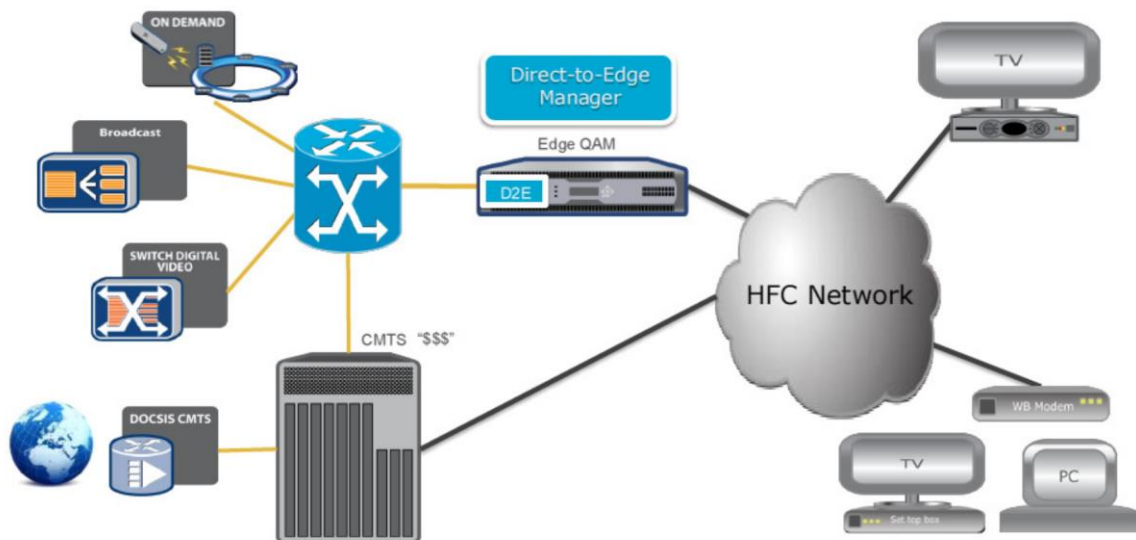
HARMONIC bNSG 9000

UNIVERSAL EDGEQAM/DIGITAL VIDEO GATEWAY



Der bNSG 9000 ist ein skalierbarer und hochflexibler Digital Video Gateway, der neben seiner EdgeQAM-Funktionalität (bis zu 108 8-MHz-Kanäle) eine Fülle weiterer Möglichkeiten wie z.B. Multiplexing, PID Remapping/Filtering oder Scrambling bietet. Neben Digital Video kann es ebenso für Docsis 3.0 (M-CMTS)-Applikationen eingesetzt werden.

- Hoch modulare 2-HE-Plattform mit sehr hoher Modul-Dichte: bis zu 9 QAM HF-Module, jedes mit bis zu 12 QAM-Kanälen
- Volle Docsis3.0-Kompatibilität (M-CMTS)
- Redundantes Power Supply (inkl. Load Sharing)
- Processing-Modul mit 3 GbE ports
- PID Remapping & Filtering
- SI/PSI Extraction & Spooling
- Mehrere IP Schnittstellen (SPTS/MPTS)
- IP-Schnittstellen-Pass-through
- Service-Redundanz
- Management über Aurora NMX-Plattform



SPEZIFIKATIONEN

GBE-INPUT	
Type	Gigabit Ethernet 802.3z
Ports	3 Independent ports
Connector	3 x 1 000Base-T, RJ45 ports 3 x SFP cages
I/O Speed	1 x 960 Mbps per port
IP Encapsulation	MPEG TS over UDP/IP/MA 1 to 7 TS/ IP
MPEG Format	188 Bytes per TS packet
I/O Processing	Up to 960 Mbps per port
Addressing & Protocol	Multicast (IGMPv1,v2)
Management	ARP, ICMP
ASI MONITOR PORT	
Type	ASI Output
Connector	BNC, 75Ω
Configuration	Configurable mirroring per QAM
MPEG Format	188 Bytes per TS packet
MANAGEMENT INTERFACES	
Ethernet	2 x 10/100Base-T
Connector	RJ-45 (1 Management, 1 reserved for CAS)
Serial Port	RS232 (Reserved for factory use)
RE – MULTIPLEXING	
PID	Re-mapping, filtering
PSI/SI	Extraction, spooling
QAM RF	
Connector	F-Type, 75 Ω
Ports	2 RF ports per module
RF Output Level	+62 dBmV @ 1 channel, +59 dBmV @ 2 channels, +57.2 dBmV @ 3 channels +56 dBmV @ 4 channels
RF frequency range (Annex B)	53 MHz to 867 MHz, ±3kHz, 1 kHz steps
RF frequency range (Annex A)	54 Mhz to 866 Mhz, ±3kHz, 1 kHz steps
QAM Constellations	16, 32, 64, 128, 256
Bandwidth	6Mhz or 8 Mhz
QAM Density	ITU-T J.83 Annex A mode: 1, 2, 3 or 6 adjacent QAM channels per up-converter. ITU-T J.83 Annex B or C mode: 1, 2, 4 or 8 adjacent QAM channels per up-converter.
QAM Encoding	ITU-T J.83 Annex A (DVB), Annex B and Annex C (Japan)
RF Output Power Adjustment Range	15 dB in 0.1 dB steps
Output Return Loss	14 dB
MANAGEMENT	
NMS	Aurora NMX Digital Service Manager
Protocols	TCP/IP
ENVIRONMENTAL	
Operating Temperature Range	0° to 50 °C
Storage Temperature Range	-20° to +80 °C
Relative Humidity	0 to 95% non-condensing
Operating Altitude	Up to 4,572 meters (15,000 feet)
Storage Altitude	Up to 12,192 meters (40,000 feet)
PHYSICAL	
Input Voltage	85-264 VAC, 47-63 Hz 36-72V VDC
Typical Power Consumption	510W@110 VAC 500W@220 VAC 470W@-48 VDC
Power Modules	2 x AC or 2 x DC redundant, load sharing power supplies
Dimensions (WxHxD)	48.26 cm x 8.81 cm x 52.7 cm (2 RU)
Weight	15.4 kg
Chassis and processing board	1.8 kg
Power supplies	1.0 kg