

Lucent Network Gateway



The Lucent Network Gateway is the media gateway component in Lucent's IP MultiMedia Subsystem (IMS) Portfolio. As the cornerstone of the converged network, it seamlessly and economically merges the traditional PSTN with proliferating IP networks. Because it is bearer protocol agnostic, the Network Gateway supports a wide variety of wireline and wireless applications. Converged applications may be combined in the same gateway enabling TDM, ATM and IP access along with traditional TDM trunking to the PSTN/GSTN. The Network Gateway also provides wireless access to the Radio Access Network for both a GSM (A interface) and UMTS (Iu-CS interface) wireless system and may also be used in a 3GPP R5 environment as the media gateway for an IP Multimedia Subsystem.

Features

- Bearer protocol agnostic
- Wireline/wireless packet codec support
- Standardized protocols and open interfaces support
- 21,000+ VoIP or VoATM channels, fully protected
- 80,000+ TDM channels, fully protected

Benefits

- High density
- Multi-protocol, multi-application
- Open, scalable
- Latency-free TDM switching
- Complete range of packet and legacy interfaces

Applications

- Class 5 end office, Class 3 or 4 tandem switching
- Simultaneous legacy and IP access support
- Media Gateway for GSM and UMTS Radio Access Network
- 3GPP/3GPP2 IMS Media Gateway

Technical Specifications

Description

1. Protocol Support

- ITU-T H.248, IUA, LAPD, CAS (FG-D, Line Signaling)
- RTP/UDP/IP/GigE or ATM; ATM UNI, AAL2 and AAL5

2. Bearer Support

- TDM: G.711, u-law and a-law
- IP/ATM: G.711, G.726, G.729a, G.723.1, Clearmode, AMR, EVRC*
- Echo: G.168, G.164, G.165, up to 128ms tail
- Silence suppression/comfort noise generation
- Fixed and adaptive jitter buffer
- Standard and custom announcements
- Call progress tones
- Support of bearer path packet duplication for a CALEA/LI and handover solutions
- Ability to interconnect with a CALEA/LI server via supported interfaces

3. Capacity

- 21,504 VoIP or VoATM channels, fully protected
- 80,640 TDM channels, fully protected

4. Redundancy and Availability

- 1:N redundant Voice over Packet server modules
- 1:N redundant TDM I/O modules (electrical)
- 1+1 TDM I/O modules (optical)
- 1:1 Ethernet I/O modules
- 1+1 ATM AAL2 modules
- 1:1 System Processor modules
- 1:1 Switch Fabric modules



Technical Specifications (*continued*)

Description

4. **Redundancy and Availability**

- In-service upgrades and failovers
- All modules are hot swappable

5. **Input/Output Support**

- 28-port DS1, channelized: SF, ESF, B8ZS, AMI
- 28-port E1, channelized: CRC4, HDB3
- 3-port DS3/STS-1, channelized: VT1.5 or M13/C-Bit mapped, B3ZS
- 8-port DS3/STS-1, channelized: VT1.5 or M13/C-Bit mapped, B3ZS
- 3-port OC-3 channelized
- 3-port STM-1, STM-1J channelized*
- 4-port 1000 base-TX/SX/LX (GBIC modules)
- 5x 10/100Base-T interfaces for system management & signaling

6. **Management Support**

- TL1 command line interface
- SNMP V1/V2c traps
- SNMP MIBII, Chassis MIB, Alarm MIB
- Optional Element Management System that provides an easy to use GUI

7. **Physical**

- 24.5" H x 21.5" W x 18" D including cabling
- 180 lbs, fully loaded
- -40 to -56.7 Vdc, 1450 watts fully loaded
- NEBS and ETSI compliant for CO operating environment
- Redundant BITS timing support with internal Stratum 3 sources
- CE and UL certified

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