# Clarent<sup>®</sup> BHG<sup>™</sup>

Backbone High-density Gateway.

# The Clarent BHG

media gateway is the ideal trunking gateway complement to the Clarent Class 4 Call Manager and Clarent softswitch – a proven software replacement for the traditional TDM switch.



Carrier grade reliability

NEBS compliance (Level 3 certification)

High density and scalability

Hot swappable blades, power supplies and fan tray

Up to 64 E1 or 80 T1 interfaces

Universal deployment supports multiple signaling protocols

# Evolutionary solution for next generation networks

The logical course of telecommunications evolution points emphatically in one direction... converged voice and data networks. Network consolidation, downward price pressure, and arbitrage opportunities are making the transition from the PSTN circuit-switched model to next generation networks crucial to the success of Tier I and Tier II providers. The Clarent NGN (Next Generation Network) is designed specifically to facilitate this migration seamlessly, while simultaneously allowing Carriers to realize their existing PSTN investments. The Clarent NGN is an intelligent aggregate of cost effective, highly flexible products and services that provide the perfect solution for continued success and profitability in providing the next generation of voice services.

## Reliability. Scalability. High density.

The Clarent BHG (Backbone High-density Gateway), the media gateway component of the Clarent NGN, gives customers the immediate advantage of a carrier grade media gateway. This means customers quickly gain the reliability, scalability, and high-density features critical to the future success of telecommunication service providers.

# Features

Built to support the stringent Telco reliability requirements, the Clarent BHG offers redundancy via N+1 power supplies. This configuration assures constant availability, and constant availability translates into superior reliability, a feature further illustrated in the United States through the Clarent BHG's NEBS level 3 compliance. The Clarent BHG supports VoIP applications requiring voice compression algorithms, or fax/data modem support, and can be configured for internet offload applications.

Harnessed within the Clarent BHG is high density and scalability. Scalable from 240 to 1920 ports per chassis, and up to 7680 ports utilizing a seven-foot rack, customers selecting Clarent subsequently eliminate the need for future forklift upgrades.

Clarent furthers its proven universal solutions support for open industry protocol standards, including MGCP for its call control, and SS7, ISDN, and MF trunking. This provides seamless protocol integration with networks across the globe and affords Clarent customers' peace of mind: a total solution that caters to the needs of today and provides the ability to scale for the demands of tomorrow.





# **Specifications**

## Telco Grade Reliability and Serviceability

- New compact PCI high density trunking gateway
- · NEBS Level 3 compliant chassis with custom backplane
- Up to 64 E1 or 80 T1 interfaces per chassis
- · Backplane design provides high reliability
- · DSP blades with LIMs
- 10/100/1000 Ethernet Switch Blade, Layer 2 control · Alarm blade monitors the health of the chassis' three
- power supplies and fan tray
- Hot swappable blades, power supplies and fan tray
- OAM&P services

#### Redundancy

- Primary/secondary Ethernet switch cards
- N + 1 redundancy for power supplies high density and scalable
- · Scales from 240 to 1920 ports on each Backbone High-Density chassis
- Scales up to 7680 ports (4 shelves) per each 7 foot by 19" equipment rack

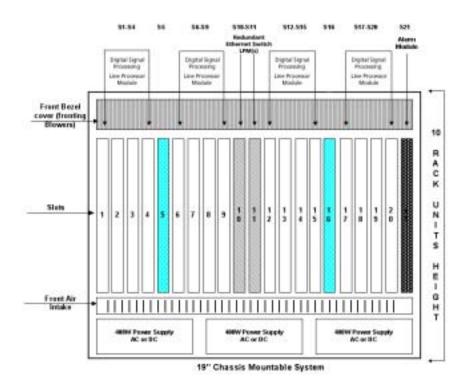
#### **PSTN (T1 or E1) Interface**

- The two to sixteen Line Interface Modules (LIMs) installed in the rear of the chassis bring in either T1 or E1 signals from the PSTN through the custom backplane to their associated DSP blades, ultimately sent out in packets on a gigabit Ethernet link to the IP cloud.
- The Clarent BHG is fully integrated with other Clarent products: Clarent Gateways, Clarent Command Center™, Clarent Class 5 Call Manager, and Clarent H.323 Gatekeeper

#### **Additional Functionality**

- · For connection to SS7 networks Clarent includes the Clarent MPSS
- · Wide Area Network bandwidth reduction: Up to 12:1 compression via Clarent ThroughPacket®

#### **Technical Specifications**



- 625 Watts @13 Amps Nominal
- 960 Watts @ 20 Amps Maximum
- Weight
  - 86 Pounds
- 39 Kilograms Dimensions
- 17.5 in x 17 in x 16 in
- 444.5 mm x 431.8 mm x 406.4 mm
- Temperature
- Operating: 5°C to 40°C (41°F to 104°F)
- Short Term\*: -5°C to 50°C (23°F to 122°F)
  - \*Short-term refers to a period of not more than 96 consecutive hours and a total of not more than 15 days in 1 year
- Non-operational packaged: -40°C to 70°C
- Transport and storage (Includes low temp and high temp thermal shock)
- Relative Humidity
- Operating: 5% to 85%
- Short Term\*: 5% to 90%
- (not to exceed 0.024 kg water/kg of dry air) Non-operational packaged: 90% to 95% at 40°C for
- 96 Hours
- High relative humidity Altitude

- 60 m (197 ft) below sea level, through +4000 m (13,123 ft) above sea level
- Earthquake
- NEBS Zone 4
- Mounting options
- Rack ears (included in accessories box)
- Safety
- Approved to IEC 60950, EN 60950/A11.
- CE Mark for Product Safety.

EMC

Complies with CFR47, FCC Part 15 Class B, EN55022, EN55024 and EN50082-1.

#### www.clarent.com



#### CORPORATE HEADQUARTERS

700 Chesapeake Drive Redwood City, CA 94063 USA Tel. 1 888 CLARENT, (1 888 252 7368) 1 650 306 7511 Fax 1 650 306 7512 Email: sales@clarent.com

#### ASIA PACIFIC Hong Kong

Tel. 852 2587 8862 Fax 852 2157 0388 Email: sales.hk@clarent.com

# Email: sales.eu@clarent.com

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EUROPE, MIDDLE EAST, AFRICA

### Milton Keynes, UK Tel. 44 1908 306 500 Fax 44 1908 306 501

Power -48VDC