



Alcatel 7570 MG

Media Gateway

First large-scale true NGN media gateway for wireless communications

The Alcatel 7570 Media Gateway (MG) provides the next-generation switching functionality that is the centerpiece of Alcatel's distributed switching solution for mobile networks. It is a high-density, multiservice media gateway designed specifically for today's 2G/3G networks and tomorrow's IP multimedia subsystem (IMS) where superior density and scalability are required.

The Alcatel 7570 MG combines a carrier-grade redundant architecture with a field-proven platform to deliver fully redundant switching with no single point of failure. With its TDM/ATM/IP/MPLS interfaces, it supports simultaneous any-to-any switching for circuit-switched and packet-switched traffic and is designed to ensure high quality and availability of voice services. In addition, a small footprint, modular structure and easily scalable architecture make the Alcatel 7570 MG a cost-effective and cost-efficient media gateway solution.

This purpose-built media gateway is designed for today's network implementations. It provides:

- > Support for multiple interfaces (ATM/TDM/IP/MPLS) to fit into any transport environment, including use as a signaling gateway (MTP BB/MTP NB/M3UA)
- > Optimized backbone bandwidth and transcoding resources by utilizing TFO, TrFO and extensive CODEC support (G.711/G.726/G.729/AMR/EFR CODECS)

- > Single Ethernet fabric optimized for all-IP networks
- > Superior service integration for flexible and easy network evolution via software upgrades

This advanced media gateway is fully compliant with 3GPP R4 and delivers integrated support for circuit-switch based data services (fax, modem) and signaling. At the same time, it is designed to enable a quick evolution to all-IP networks with 3GPP R5/R6 built-in functionality.

In addition, the Alcatel 7570 MG is part of Alcatel's Common Open IT Platform strategy based on Advanced Telecommunications Computing Architecture (ATCA) and the first ATCA-based next-generation media gateway for the mobile market.

Together with a call server and element management system, the Alcatel 7570 MG is an integral part of Alcatel's Distributed Mobile Switching Center (DMSC) solution. The Alcatel DMSC solution delivers a drastically simplified architecture, enabling seamless evolution to a next generation network (NGN) regardless of the underlying technology. It provides the highest degree of technological, operational and deployment flexibility to help operators cost-effectively optimize their networks and deliver maximum business value.

Technical Summary

Capacity

- > Scalable from 16 E1 to 3,072 E1
- > Scalable from 1 STM-1 to 48 STM-1
- > Scalable from 50,000 to 2 million subscribers

Physical Dimensions (Rack)

- > Height: 83.66 in. (2,125 mm)
- > Width: 23.62 in. (600 mm)
- > Depth: 31.49 in. (800 mm)
- > Weight: 550 lb (250 kg)

Electrical Characteristics

- > Power inputs: four -48 V DC feeds
- > Input current: four 75 A feeds
- > Input voltage: -40.5 V to -72 V DC
- > Power consumption: 3,960 W (max)

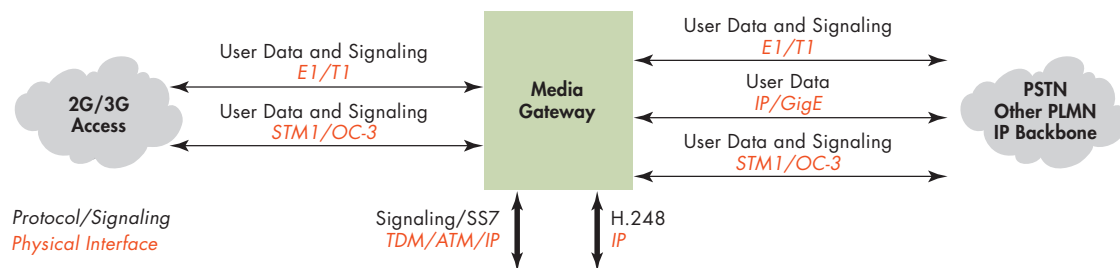
Network Attachment Compliance

- > ITU-T G.703 Physical/electrical characteristics of hierarchical digital interfaces
- > ITU-T G.707 Network node interface for the synchronous digital hierarchy (SDH)
- > ITU-T G.813 Timing characteristics of SDH equipment slave clocks (SEC)
- > ITU-T G.823 The control of jitter and wander within digital networks which are based on the 2048 kb/s hierarchy
- > ITU-T G.825 The control of jitter and wander within digital networks which are based on SDH
- > ITU-T G.957 Optical interfaces for equipments and systems relating to SDH

Environmental Conditions

Field	Comment
EMC	<ul style="list-style-type: none"> > EN 300 386: Telecommunication Network Equipment, Electromagnetic Compatibility (EMC) requirements > EC 61000-4: Testing and measurement techniques > IEC 61000-4-2: Electrostatic discharge > IEC 61000-4-3: Radiated, radio-frequency, electromagnetic field > IEC 61000-4-4: Electrical fast transient/burst > IEC 61000-4-5: Surge immunity > IEC 61000 4-6: Immunity to conducted disturbances induced by radio-frequency fields
Safety	Com EN 60950: Safety of information technology equipment
Power and grounding requirements	<ul style="list-style-type: none"> > ETS 300 132-2: Power supply interface at the input to telecommunications equipment; Part 2 Operated by direct current (dc) > ETS 300 253: Earthing and bonding of telecommunication equipment inside telecommunications centres
Climatic and mechanical	<ul style="list-style-type: none"> > ETS 300 019-2-1: Environmental conditions and environmental tests for telecommunications equipment; Part 2-1: Specification of environmental tests; Storage > ETS 300 019-2-2: Environmental conditions and environmental tests for telecommunications equipment; Part 2-2: Specification of environmental tests; Transportation > ETS 300 019-2-3: Environmental conditions and environmental tests for telecommunications equipment; Part 2-3: Specification of environmental tests; Stationary use at weather protected locations
Fire resistance	Telcordia GR-63-CORE, Sections 4.2 and 5.2
Seismic	ETS 300 019-2-3/A1
Acoustics	ETS 300 753 Class 3.1 (1997): Acoustic noise emitted by telecommunications equipment

External Interfaces



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