



ElettraSuite Gateway

Extend TETRA calls towards all over
the world communications

tetra solutions



network elements

ADAPTANET[™]
IP solution

ELETTRA
SUITE

 **SELEX**
Communications
A Finmeccanica Company



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PRODUCT DESCRIPTION

The new SELEX Communications **EletraSuite Gateway (GW)** is a major element in EletraSuite ADAPTANET® network, providing gateway services between TETRA IP network and the external world. The *EletraSuite* GW is a versatile, reliable, full-featured IP gateway and IP router for PMR professional networks where scalability and redundancy are required. It has been designed to integrate additional features and interfaces dedicated to professional networks.

With the increasing availability of different communications' technologies, interoperability among systems is emerging as an important user issue, especially in mission-critical operations where TETRA is the main actor.

Moreover, typical professional users, acting in challenging or emergency scenarios, need a constant and reliable connection with remote command posts, which sometimes are only reachable through a traditional telephone network. The *EletraSuite* GW, whose hardware is based on the PERSEUS platform, provides the same Gateway capabilities as per the standard TDM Gateway.

It also provides additional services, such as Packet Data network interface, dynamic routing, professional SoftSwitching, support of NAT protocol interface, connectivity towards conventional Radio Network Interface (via 4 Wires E&M ports).

The *EletraSuite* GW is the ideal solution when interoperability amongst different radio access technologies is mandatory.

MAIN FEATURES

The EletraSuite GW can be used in different telephone or data network environments. It provides gateway services between the ADAPTANET® network and the following telephone network technologies:

- ISDN networks
- Analogical telephone network
- VoIP networks (SIP, IAX, H.323)

Legacy TETRA TDM networks are also supported by means of ISDN PRI link.

EletraSuite GW is available in two different hardware deployments:

- **Low-end configuration**
- **High-end configuration**

Characterised by different performances and suitable for various scenarios. These configurations have been developed with the aim of making ever more affordable an already competitive and performing product.

The difference between these two models is the presence or absence of an optional voice processing board, whose presence allows higher performances (i.e. a greater number of calls).

The flexibility of the *EletraSuite* GW allows customers to choose the solution which best fits their needs.

Configurations

Gateway "Low-end"

This configuration doesn't include the optional voice processing board, so it represents the cheapest and most competitive solution. It supports up to 16 voice calls and contains the following telephone boards:

- Amtelco 4WE&M (with DC5 / Radio Interface)
- ISDN-PRI
- Analogue FXS or Analogue FXO.

Gateway "High-end"

This configuration include the optional voice processing board (Prosody X) and represents an empowered solution in terms of voice performances supporting up to 30 voice calls.

TECHNICAL CHARACTERISTICS

Based on PERSEUS hardware platform, *ElettraSuite* GW is hosted in a compact 2HE steel chassis, it is based on Linux GENTOO SW distribution Operating System and on reviewed ASTERISK application.

TECHNICAL DATA

• L3 Routing:	<ul style="list-style-type: none">- OSPF v2- BGP v4- RIP v1, RIP v2
• L2 capability:	<ul style="list-style-type: none">- VLAN- Proxy ARP- PPP
• IP Security:	<ul style="list-style-type: none">- IPSec- Firewalling- NAT
• Interfaces:	<ul style="list-style-type: none">- E1 G.703/G.704- Gbit Ethernet 10/100/1000 BT- Ethernet 100FX- PRI VoIP- ISDN- Analogue FXS/FXO
• VoIP Services:	<ul style="list-style-type: none">- SIP- IAX- H.323
• QoS (DiffServ and traffic shaping):	<ul style="list-style-type: none">- CBWFQ- LLQ- CAR- WRED
• IP Mobility:	<ul style="list-style-type: none">- Mobile IP

• Network Services:	<ul style="list-style-type: none">- DHCP- NTP- RADIUS
• Redundancy:	<ul style="list-style-type: none">- VRRP- Link Bonding
• Management:	<ul style="list-style-type: none">- SNMP- Web Interface- Configuration files

General features

Physical dimensions:	Height: 90 mm (2 U) Width: 430 mm (standard 19" rack) Depth: 460 mm
Weight (<i>fully equipped</i>):	About 10 kg
Protection degree:	IP20
Cooling system:	Air forced cooling system front to rear
Power Supply:	110-220 VAC, 50-60 Hz
Power consumption (<i>fully equipped</i>):	Max. 150 W

Environmental Conditions

Storage:	ETSI ETS 300 019-1-1 class 1.2
Transportation:	ETSI ETS 300 019-1-2 class 2.2
Operation:	ETSI ETS 300 019-1-3 class 3.1 (+5 ° to +40 °C)
EMC:	<i>ElettraSuite</i> GW is compliant with the EN 300 386 standard. This concerns both emissions and immunity requirements. Emissions limits shall be those of the standard EN 55022 class A.
Safety:	<i>ElettraSuite</i> GW shall be compliant to the standard CENELEC EN 60950-1

