

SAGEM 3P@C 4450E

Multi-Service IP-DSLAM



- **Universal compact and flexible platform**

- **NG DSLAM**

- ADSL, ADSL2/2+ and VDSL access technologies
 - Giga and Fast Ethernet uplinks
 - Optical and electrical plug-ins
- IP and Ethernet QoS processing
 - Video Multicast capabilities
 - B-RAS enhanced features

- **Easy provisioning and monitoring**



*Triple Play Access Concentrator
for NG networks and services*



SAGEM

Technology in Action



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Multi-Service IP-DSLAM

FEATURES AND BENEFITS

As the heart of Next Generation network architecture, the **SAGEM 3P@C 4450E** is a high-performance IP-DSLAM platform that enables to deliver a wide variety of services such as broadband internet, voice over packet, LAN to LAN connections, video multicast streaming, leased lines and VPN, on any subscriber line.

Thanks to their flexible, modular and scalable design, **SAGEM 3P@C** systems can provide all services simply by the composition of relevant units in the same carrier-class platform.

• NG-DSLAM

SAGEM 3P@C supports any combinations of ADSL, ADSL2/2+ or VDSL user interfaces in several types of high-density configurations : mini-shelf and large shelves.

Thanks to its internal architecture, the **SAGEM 3P@C** is able to concentrate user streams and switch them to several network interfaces, managing traffic parameters in order to guarantee QoS requirements. Subtending interfaces can be used to create star and daisy-chain extensions, offering a high scalability in order to reach remote users.

A wide variety of Fast Ethernet and Giga Ethernet uplink interfaces allows the connection to Next Generation IP and Ethernet networks. Enhanced video services can be delivered over ADSL2+ or ADSL connections, such as TV broadcast, Video on Demand and Pay Per View, using **SAGEM 3P@C** multicast and IGMP capabilities. Connecting to ISP network, **SAGEM 3P@C** can support B-RAS features such as PPP session processing, tunnelling and termination, user authentication, IP address management and dynamic routing.

• MANAGEMENT

SAGEM IONOS NMS management platform is designed for the supervision, monitoring and configuration of the whole **SAGEM 3P@C** product family. This powerful NMS allows network-wide visibility and provides user-friendly graphical features. In addition, **IONOS NMS** enhances operational efficiency with its powerful client/server architecture.

• SCALABLE RANGE

SAGEM 3P@C is a complete range of access equipment, scaling from small sized configurations to large central office nodes.

SAGEM 3P@C 4450E is dedicated to high density CO, connecting up to 672 DSL users per subrack, whereas **SAGEM 3P@C 4048E** is designed for small CO or remote sites connecting up to 48 ADSL users.

The micro-DSLAM is targeted to specific applications, such as Multi-Tenant Unit (MTU) and remote area. Thanks to its stackable design, up to 192 users can be connected as the need for broadband connections grows.

TECHNICAL FEATURES

INTERFACES

Network interfaces per switch card

- 2 x GigaEthernet Fx uplinks (SFP option)
- 1 x Ethernet 100Base-Tx

Subscriber interfaces per access card

- 48 ADSL (G.992.1, Annex A)
ADSL2+ (G.992.5 Annex A)
RE-ADSL2 (G.992.3 Annex L)
Built-in splitter
- 32 ADSL + POTS Combo card
- 24 VDSL (G.997/G.998) Built-in Splitters

PROTOCOL SUPPORT

IP/Ethernet

- IEEE 802.1D Spanning Tree
- IEEE 802.1Q VLAN
- IEEE 802.1ac VLAN tagging
- IEEE 802.1P Priority marking
- IGMPv2, IGMP Snooping and Proxy
- IP Multicast support
- IP Quality of service : Diffserv, ToS
- Protocol Filtering
- Rate limiting
- PPP session RFC 1661, PPPoE RFC 2516
- Radius client

PROTECTION SWITCHING

- Main control unit redundancy
- Network interface unit switching

CONFIGURATION AND MANAGEMENT

- Local/remote CLI interface via V.24/V.28 port
- Telnet, FTP
- SNMP v2 (RFC 1157)
Out-band interface via Ethernet 10/100BT
In-band IP interface
IONOS NMS platform

PHYSICAL SPECIFICATIONS

- ETSI or 19" compatible
- **3P@C 4450E Large shelf**
- H x W x D = 10U x 19" x 430 mm
- 2 slots for Switching Matrix (redundancy)
- 14 slots for Access cards

POWER SUPPLY

- Dual -48Vdc input
- External AC/DC converter
- Power consumption : 250 to 750W depending on configuration

OPERATING CONDITIONS

- Temperature : -5 to 50°C
- Humidity : 5% to 95% non-condensing
- EMC : EN 55022; EN 55024
- Safety : EN 60950
- CE marking

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