

A compact micro office solution



Is it for you?

The LAKE Sigma offers a total SOHO voice and Internet access solution in a single platform

For customers running a business from home, Sigma is the ideal system that satisfies both the household and office needs.

Sigma allows you to add to PSTN phone lines with VoIP at a fraction of the cost of additional PSTN phone lines.







Product Overview

The SIGMA is the premier product for one or two line businesses that require broadband communications as well as feature rich voice services and data networking.

The SIGMA is a unique product as it offers a total SOHO office solution in a single platform.

By combining a fully featured PABX with a VoIP and data gateway, VoIP and PSTN calls are handled in the same manner, therefore it is possible to switch a call which has been made or received on a VoIP line, allowing the VoIP channels to be used in the same way as a PSTN telephone line.

- SIGMA is a practical, convenient and affordable office in a box solution for the smallest business and home offices for up to 8 users
- It is the only package to bring voice, broadband and data communications in one box with dedicated helpdesk support
- It boasts extensive call handling features:
 - Wired and DECT extensions
 - ADSL modem
 - 4 port router
 - Firewall
 - WLAN
 - 2 x VoIP Channels to provide 2 extra voice lines.

All of this is provided in a streamlined contemporary desktop design that is an attractive feature in any office.

Features & Benefits

Fully featured PABX

Supporting both wired Feature Phone extensions and integrated Digital cordless extensions together with a complete data solution including wireless LAN. It supports 4 wired extensions, integrated voicemail (2 port), music on hold and shared system directory (available from both Feature and DECT Phones) and music on hold.

Supports 2 PSTN lines & integrates 2 VoIP Channels

The Sigma also integrates 2 channels of VoIP seamlessly into the PABX. This offers end users the security of PSTN for emergency and local calls and the additional capacity and cost advantages of VoIP for long distance calls without any complicated external equipment.

Complete Data Solution

The Sigma is also a fully featured data solution and is equipped with ADSL 2+ modem for fast Internet access, router, firewall, 4 Ethernet ports and an integrated WiFi (802.11b/g) access point. Internet access through an external modem such as a Cable Modem can be supported using the WAN port.

Ease of Setup

All setup and configuration by the user is easily performed through an intuitive web interface.

A remote access option is also available to enable a network operator/supplier to remotely configure and manage the Sigma.

Complete Solution

For the network operator/supplier, Sigma is the platform, which can enable the operator to create a 'sticky' bundle of ADSL, PSTN and VoIP services to satisfy the complete communication needs of the end user.

Doorphone

A doorphone can also be supported on one of the Wired extensions. A doorstrike output can be used to remotely open a door.

Accessories

A range of accessories are available including a Doorphone and external music on hold adaptor

Data Gateway Features

- WAN interfaces
- WLAN
- DHCP server
- DNS relay
- Routing
- Stateful Inspection Firewall
- Virtual server (including PAT and DMZ host)
- IGMP proxy
- VoIP (SIP 2.0)

WAN Interface

- The router has the following WAN interfaces:
- 10/100 BaseT Ethernet WAN port
 - ADSL 2+ modem

LAN Ports

4 x 10/100 BaseT Ethernet ports

Quality of Service

- Voice Service is prioritised over the data traffic (Network Dependant)

VoIP Functionality

2 x SIP (RFC 3261) voice channels

The following codecs are available to each channel:

- G.711 (64 kb/s) μ -Law
- G.711 (64KB/S A-Law)
- G.729 A/B (8 kb/s)
- G.726 (32 kb/s)

The following features are used by the gateway:

- VAD (Voice Activity Detection)
- Silence suppression
- Comfort noise
- Echo cancellation (G.168)

ADSL Modem

The modem complies with the following
ANSI T1.413 Issue 2
ITU-T G.992.1 Annex A / B (G.DMT)
ITU-T G.992.2 (G.lite)
ITU-T G.992.3 (G.dmt.bis)
ITU-T G.992.5 (ADSL 2+)

Protocol Support

PPPoA
PPPoE
RFC 1483

Management Application

Management system configuration via an intuitive web-based graphical user interface

Full Remote Management Application

Security:

Wireless - WEP and WPA are both supported for wireless security

Firewall - Stateful Inspection Firewall
Network Address Translation
Intrusion detection

Music on hold

- External calls – music or tone

External music on hold

- External music devices connect via the MOH module to any extension port
- Stereo 3.5mm jack
- Output Level 25 – 32mA, Impedance 600 ohm

Environmental requirements

Normal working temperature: 0°C to 40°C
Working humidity (non-condensing):
5% to 95%

Safety and protection

EN55022, EN55024, EN60950

Voicemail

Integrated voicemail application

Voicemail capacities

10 Individual user mailboxes
1 system mailbox (answering machine)
2 Port: 30 Mins messaging capacity

Power Supply

AC-to-DC power adapter (provided)
110/220v AC - input
24 V DC 1.0A - output

Dimensions

200mm (W) x 190mm (H) x 80mm (D)

Feature Phones

- Large high contrast display
- Integrated speakerphone / conference
- Dual coloured programmable keys/LEDs

Feature Set includes

- Call Pickup
- Call Waiting
- Conference
- Call Forward
- Do Not Disturb
- Night service
- Call Hold
- Music on Hold
- Redial
- Reminder Call
- Speed Dial
- Voicemail

Shared Directory (DECT and Feature Phone)

PABX Capacity

2 PSTN lines
4 x Wired extensions
(Up to 4 fully featured Feature Phones)
Integrated DECT base station with support for 4 or 6 DECT handsets (GAP compliant)

Euro DECT and UPCS (US DECT) options

Wireless LAN Access Point

An 802.11b/g WiFi Access Point is provided.

Doorstrike relay contact
Max rating: 24 Volts DC, 2 Amps
Door intercom size
HxWxD: 203mm x 73mm x 38mm