

# STENTOFON®

## AlphaCom™

### Evolution

- Entering the World of IP
- IP concept description



# STENTOFON® AlphaCom™ Evolution

## – Entering the World of IP

The STENTOFON® AlphaCom™ is recognized for its unique capabilities, meeting all communication and security needs in demanding environments. It has proved to be extremely efficient when used in networks for industrial complexes, health care institutions, prisons and jails, financial institutions, transportation providers, high security buildings, vessels, oil platforms and other areas where communication and security is of vital importance.

The AlphaCom™ system is developed, produced and marketed by Zenitel, a world leading supplier of critical communication systems worldwide. Our products satisfy customer needs that include security and time-critical communications. We're proud of our reputation of having the most flexible, reliable and superior quality hands-free communication systems today. Zenitel has now taken an important step further with the AlphaCom™ Evolution, entering the world of IP. The AlphaCom™ Evolution offers completely new ways of improving your internal communication and security solutions.

### ***Best of two worlds***

The AlphaCom™ Evolution combines the best of the present advanced AlphaCom™ system with the latest IP, Linux and embedded networking technologies. When entering the IP world, no compromise has been made. The AlphaCom™ Evolution provides the complete set of existing services, quality, reliability and security characteristics for which AlphaCom™ has always been recognized. Some of the special features it brings into the IP domain are wideband (7 KHz) audio, a built-in firewall, hardware encryption and low latency switching.

In addition to these important characteristics, a new set of innovative services have been introduced to improve cost efficiency, service capabilities and system operation.

If you are already using an AlphaCom™, you can continue to use the existing equipment, thereby capitalizing on equipment and competence. The AlphaCom™ Evolution provides full backward compatibility, and it is up to you to decide on the mix of new generation IP stations and services and traditional stations and services. It is also entirely up to you to decide on the pace at which you want to enter the new IP world.

### ***Cost effective***

The AlphaCom™ Evolution provides a set of new cost saving features, including:

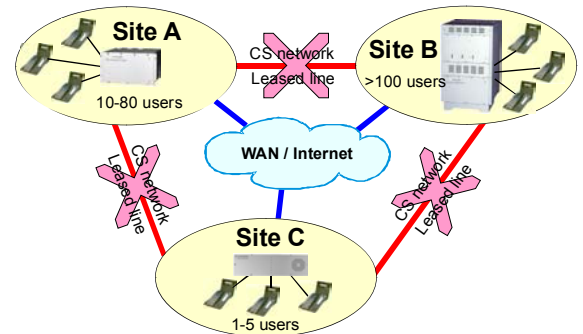
- VoIP AlphaNet™
- VoIP Branch Office Solution
- Cabling and infrastructure

### VoIP AlphaNet™

VoIP AlphaNet™ can significantly reduce operating costs, allowing two or more AlphaCom™ systems to be networked seamlessly together over the corporate IP network.

This allows you to move your audio traffic over to your WAN data network, having only a single network to handle. In addition WAN links have experienced large price cuts during the last year due to the introduction of new technologies (DSL, Gigabit Ethernet and LMDS) and increased competition in the market.

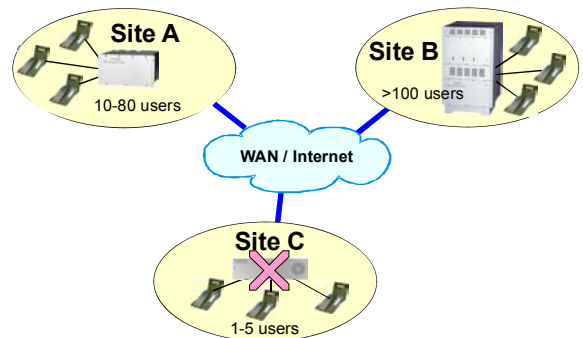
Comparison studies show that VoIP AlphaNet™ provides significant lower operating costs than traditional networking.



### Branch office solution

It is no longer necessary to have a dedicated AlphaCom™ exchange in smaller branch offices. The stations can be directly linked to the larger AlphaCom™ system in the central office, thus saving cost and administration overhead.

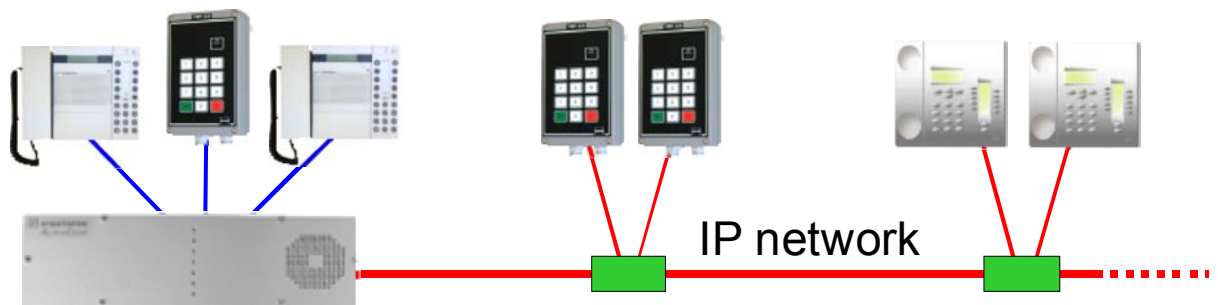
In addition the embedded firewall capability supports the needed security to connect AlphaCom™ directly to the public Internet. This means that you can even link in home and smaller branches to the central office over Internet.



### Cabling and infrastructure

In addition to providing support for traditional star cabling, the AlphaCom™ Evolution allows sharing of the LAN with the other data services. To provide security and quality in a shared environment, AlphaCom™ supports virtual LAN (VLAN) for network separation as well as encryption and IP Quality of Service.

In situations where a shared data infrastructure is not desired, Ethernet switching and cabling provide an improved way of cabling compared to traditional star wiring. Ethernet supports a multitude of transmission media including CAT5, fiber, wireless and coaxial cable. In addition one Ethernet link is able to carry hundreds of audio calls, allowing one core cable with local branch switches out to the stations.<sup>1</sup>



<sup>1</sup> The redundant core networking can be applied in situations where redundancy is required.

## ***New service capabilities***

The AlphaCom™ Evolution comes with a new set of innovative solutions, including:

- Complete telephony and intercom support
- Camera surveillance
- Wireless station kits
- Value added integration capabilities

## ***Telephony and intercom offering***

Over the last 10 years, Zenitel has developed a wide range of intercom and PBX features, making the AlphaCom™ system one of the communication systems with most features.

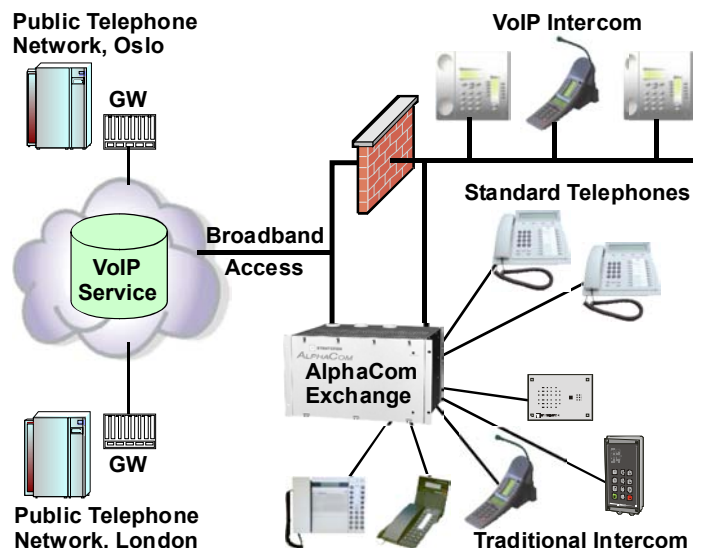
These features are offered to the users via a unique user interface which includes Dual Display™ technology, direct access keys as well as loud and low-speaking hi-fidelity audio.

The AlphaCom™ Evolution has definitely improved ways of connecting to public and private telephony systems. AlphaCom™ Evolution comes with an external gateway option, flexible regarding size (2-120 audio channels) and interface options (ISDN, CAS, analogue, VoIP).

The latest trend with Internet Telephony Service Providers makes this even more attractive, cutting down costs for making public calls.

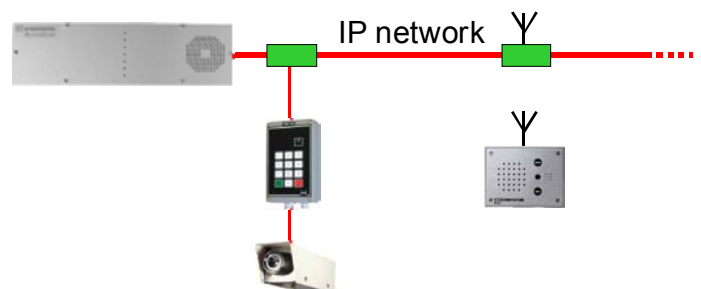
AlphaCom™ also supports standard analogue telephones.

AlphaCom™ Evolution will provide a complete communication solution for your business.



## ***Camera surveillance***

IP is the perfect technology for system integration. AlphaCom™ Evolution offers a unique solution with new LAN based camera systems. The cameras connect directly to the embedded IP switch in the stations, reducing the need for extra cabling to the camera. Furthermore, the AlphaCom™ controls what is viewed on the screen or recorded. The control of the video or still pictures is done by AlphaCom™ based on internal or external events.



## ***Wireless station kits***

In many situations it is difficult or impossible to draw a wire to where you want to locate your STENTOFON® station. Together with AlphaCom™ Evolution a new set of accessories is introduced. These accessories include a wireless station kit which will plug directly into any STENTOFON® VoIP station.

### *Value added integration capabilities*

AlphaCom™ Evolution takes a further step to enhance AlphaCom's™ renowned system integration capabilities. Value Added Integrators are given the ultimate toolbox for designing and tailoring the system in an IP environment. The new 3<sup>rd</sup> party service creation environment includes the recognized tools – all working in an IP environment:

STENTOFON® Event Handler™	Main tool for tailoring AlphaCom™ system behavior. When a function is going to be executed, an event is being sent to the Event Handler™. Using the AlphaPro™ tool, each event can trigger execution of custom scripts
STENTOFON® External Data Output™	Part of the Event Handler™ where scripts can be used to send user defined messages and commands to 3 <sup>rd</sup> party equipment. Initially developed to send commands to CCTV equipment.
STENTOFON® External Data Input™	Part of the Event Handler™ where scripts can be used to directly interface to data sent from 3 <sup>rd</sup> party equipment. Prime examples are further integration with CCTV and Fire Alarm equipment.
STENTOFON® Simple Link Layer™	Allows 3 <sup>rd</sup> party applications to control AlphaCom™ functions such as setup calls, conferences, group announcements, messages, simulate station key input, trigger Event Handler™ etc.

### **System management and operation**

The AlphaPro™ management tool is extended to work in an IP environment, allowing remote login over the IP network as well as local management over RS232. In addition a new set of modules is introduced to improve the management tasks.

Alarm Manager	Alarms are reported via Standard Management Protocols, allowing AlphaPro™ as well as other 3 <sup>rd</sup> party system management applications to report new alarms and show alarm history
Monitoring and diagnostics	Monitoring is available via Standard Management Protocols, allowing AlphaPro™ as well as other 3 <sup>rd</sup> party system management applications to retrieve important system information such as node states, link states, call information, node configuration and more. Test functions such as audio tone test are also available to do more diagnostics on the state of the system.
File management and upgrade	Software and log files can be down- and uploaded via FTP and SSH, allowing retrieval of log files as well as remote upgrading of AlphaCom™ software.
System expert tool	A console login using Telnet and SSH is available for system experts to do low level debugging and diagnostics.

The new capabilities and modules will effectively improve internal efficiency. System operation tasks such as system monitoring and surveillance, system diagnostics as well as upgrades and reconfigurations, can be performed remotely, reducing the need for support personal to go on site.

## Benefits

- ☐ Three different module sizes for you to select from according to your needs –AlphaCom M™, AlphaCom 80+™, and the full AlphaCom™ module allowing 138 subscribers to be connected.
- ☐ Modular architecture to accommodate growth and change.
- ☐ A variety of features and solutions that you can always add when desired.
- ☐ Networking capabilities to extend your system geographically and connect to other systems.
- ☐ Supports a mix of VoIP services and traditional circuit switched services in the same node.
- ☐ Wide set of special purpose terminals for all types of indoor and outdoor environments.
- ☐ Extended integration of different kinds of communication and alarm systems, access control, CCTV and public address
- ☐ 3<sup>rd</sup> party interfaces for creating value added applications.
- ☐ Superb audio quality in all environments.
- ☐ Dual Display™ technology and direct access keys on main stations.

## Concepts

- AlphaNet™                      Allows services to be available across a network of AlphaCom™ exchanges.
- Dual Display™ technology    The Dual Display™ technology offers two displays for easy use. The upper display provides dynamic labeling and status information for direct access keys. The lower display provides general display information such as number information, time and messages as well as dynamic menu labeling.