



ALPHATRON |
Marine



Telephone system

AlphaConnect Hybrid

Compact automatic telephone & talkbalk

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Analog, VoIP & digital



- ✓ Optimized for IMO/SOLAS requirements
- ✓ Approved according to IEC60945
- ✓ Compact and robust design
- ✓ Analog, digital and VoIP based
- ✓ Adaptable and cost efficient in all configurations
- ✓ Dual power supply according to IMO regulations
- ✓ Easy configuration
- ✓ Type approved (DNV-GL/ABS/RMRS)

Compact automatic telephone and talkback system

The AlphaConnect Hybrid system is an integrated communication system designed for internal and external 2-ways communication. The system is optimized for IMO and SOLAS requirements on both small and medium sized vessels. The flexible configuration of the compact AlphaConnect Hybrid provides a cost effective solution for intercom, telephone, public address and loud hailing. The modern architecture offers network connection including cascading, remote service and interface to / from other IP based systems and components.

Telephone system

- ✓ Calling between locations onboard
- ✓ Features typical functions (transfer, priority call)
- ✓ Calls via satellite communication/GSM
- ✓ Logging and billing of calls (optional)

Public address (option)

- ✓ Integrated via unique power amplifier concept
- ✓ Public address (not GA) to separate speaker network

Talk back

- ✓ Hailing to deck positions
- ✓ Handsfree operation on deck
- ✓ Push-to-talk operated from wheelhouse



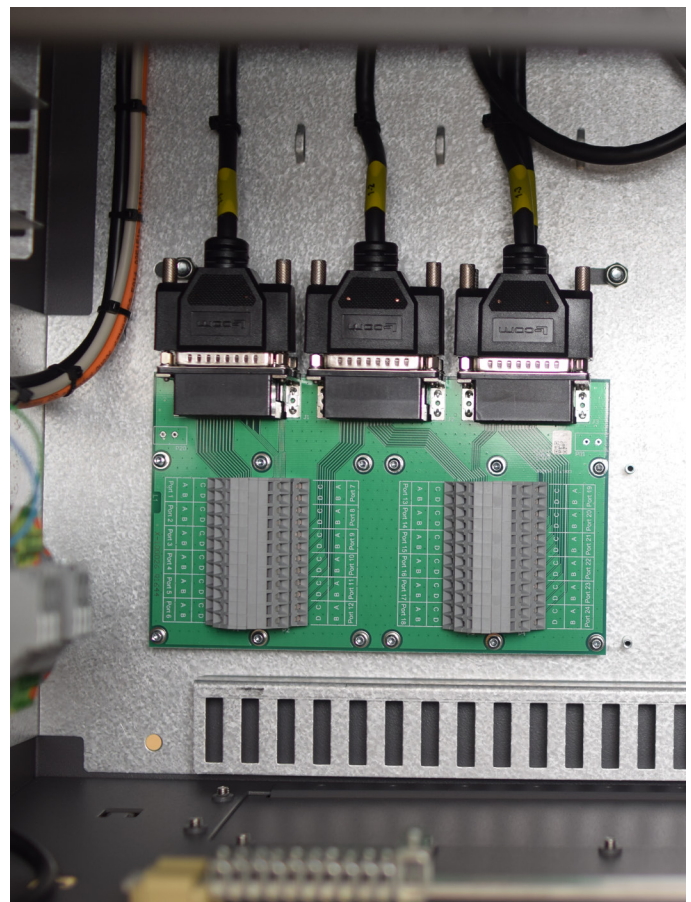
Strong communication

The AlphaConnect Hybrid provides for onboard conversations between bridge, engine control room, various cabins and offices, workshops, on deck and so on. No matter whether it is dry, wet, noisy or dirty, all locations can be covered by a standard analog telephone or by one of our communication stations with handset, headset or loudhailer. In addition, an IP network (VoIP telephone) and digital talkback system can be configured by simply adding the optional hardware.

Calls from the ship to shore can be conducted from all places on board for example, meaning that crew can have their own privacy when calling home. Calls from shore to ship can be distributed to any location onboard, typically to bridge, captain's cabin or ship's office, but with our system you do not have to be on the bridge to answer your (satellite) call.

Major functions

- ✓ PABX operation
- ✓ Intercom operation
- ✓ Public address
- ✓ Access to external systems and net.
- ✓ Cost effective modular design
- ✓ Flexible dual power supply configuration
- ✓ Flexible numbering plan
- ✓ Call groups
- ✓ Call hunting groups
- ✓ Paging groups
- ✓ Individual paging
- ✓ Intrusion
- ✓ Call transfer
- ✓ Call forwarding
- ✓ Wake up calls
- ✓ Who am I / Identification
- ✓ Automated switchboard
- ✓ Direct inward dialing
- ✓ Conference bridge
- ✓ Configurable access control
- ✓ Redundant power supplies
- ✓ Self-diagnostic functions
- ✓ Field upgradeable hardware and software
- ✓ Programmable priority structure



Standard cabinet configuration

- ✓ 16 analog line (and two port switches for optional VoIP use)
- ✓ 4 trunk lines
- ✓ E&M board for Public Address interfacing
- ✓ 1 open slot for (optional) use of 4 additional analog or digital lines
- ✓ Dual power supply (AC/AC or AC/DC)
- ✓ 24 lines termination module (connecting cables)

System overview



Hybrid hardware & interfaces

In creating a system for the future, we wanted to provide an enormous amount of expansion to suit a broad spectrum of customer needs. Each piece of hardware added provide new features. The AlphaConnect Hybrid has everything to build a professional automatic telephone and talkbalk system completely customized to what you need and what is required onboard.



FXO trunk board

- ✓ 4 lines
- ✓ Analog telephone line
- ✓ Input from various lines
- ✓ Mounted in central unit



FXS analog line board

- ✓ 4 lines
- ✓ Analog telephone line
- ✓ Mounted in central unit
- ✓ Mounted in central unit



UPN digital line board

- ✓ 4 lines
- ✓ Digital intercom line
- ✓ Supported terminals
- ✓ Mounted in central unit



E&M line board (I/O)

- ✓ PA/GA applications
- ✓ VHF/UHF radio paging
- ✓ Reliable in/out interface
- ✓ Mounted in central unit



Hybrid Central Unit

- ✓ 24 lines
- ✓ 48 VoIP registrations
- ✓ Suitable for 19-inch rack
- ✓ Power AC/AC or AC/DC



PA amplifier

- ✓ 250watt audio output power
- ✓ 100V speaker output
- ✓ Suitable for 19-inch rack



Billing unit

- ✓ Call record logging (300,000 records)
- ✓ Call record billing
- ✓ Pre-paid or post call payment
- ✓ Password protected web interface



VoIP switch

- ✓ Maritime type approved
- ✓ 24PoE Ethernet Gbit switch
- ✓ Manageable via hybrid control software
- ✓ 19-inch rack unit (1U)

Digital communication stations



6111 Waterproof unit with handset

- ✓ Loudspeaking/handset operation
- ✓ Memory buttons
- ✓ IP-56



6112 Waterproof unit without handset

- ✓ Headset connection
- ✓ Built in relay, max 5A
- ✓ IP-56



6124 Waterproof unit

- ✓ Wall mounted
- ✓ Internal speaker and microphone
- ✓ IP-56



6216 PA control unit

- ✓ Console mounted

Public Address (option)

The AlphaConnect can distribute Public Address (PA) to all stations with loudspeakers. The system gives the possibility of defining groups with priority levels and can be set up to send a gong signal preceding a spoken message. PA calls are initiated from a telephone and communication station, and do not require special control stations with goose neck microphones.



Loudspeaker

Telephones

The AlphaConnect Hybrid is using analog and VoIP telephones or digital talkbalk systems for locations such as cabins or offices, typically dry, and places with room temperature and little to no noise.

Analog telephone



AlphaPhone 100AS

- ✓ Large display
- ✓ Phonebook
- ✓ Hands-free function
- ✓ Cabin station
- ✓ Wall mounting



AlphaPhone 500

- ✓ Simple design
- ✓ Rugged design
- ✓ Cabin station
- ✓ Magnetized handset
- ✓ Wall mounting

Voice over IP (VoIP) telephone



SNOM7100

- ✓ Backlit graphical display, 4 lines
- ✓ Wall mounting
- ✓ Hands-free talking (speakerphone)
- ✓ Power over Ethernet (PoE) IEEE 802.3af, Class 1
- ✓ Electronic Hook Switch (EHS) support for wireless headsets
- ✓ Intercom operation

Analog communication stations

Typically, for onboard locations such as the bridge, engine control and steering gear room, a simple telephone will not do. Our analog communication stations share the same mechanical foundation, PCB base design, connector pins and keyboard layout, allowing for straightforward system interchanging and easy to learn and adopt by the crew as operating these advanced telephones are always alike.



Simple and water tight talk back communication system, for on deck mooring stations.

Water tight and salt mist resistant industrial telephone, for engine spaces and on deck.

Full featured flush mount station with display, for bridge and engine control room.

Full featured water tight station with display, for engine spaces and on deck.

	P211	P220	P411	P421
Handset connection	X	V	V	V
Headset connection	V	V	V	V
Call relay	V	V	V	V
External speaker	V	X	V	V
External microphone	X	X	V	V
Display	X	X	V	V
Hands-free operation	X	X	V	V
Keys	3	15	21	21
Speed dial	X	X	V	V
IP class	65	65	22	65
Mounting style	Wall	Wall	Flush	Wall



Handsets

The AlphaConnect is using analog telephones for locations such as cabins or offices, typically dry and places with room temperature and little to no noise. Optional handsets available for P220, P411 and P421. Both as a flush mounted versions (P411) and a version to be mounted to the telephone (P220 and P421). Also available in IP66.

Headsets

The AlphaConnect is using analog telephones for locations such as cabins or offices, typically dry and places with room temperature. A noise-cancelling headset is available for the AlphaPhone 500, P211, P220, P411 and P421.





Tech specs

Hardware

Compact and robust wall cabinet
24 / 48 / 72 line or 24 line + 24 VoIP capacity
Optional 250W Public Address (PA) amplifier 1671
Flexible line card selection
Scalable and distributable capacity
Modular with standardized interfaces

Dual power supply (AC/AC or AC/DC)
Energy efficient
Fault tolerant interconnection
Quick and easy field replacement
Optional Billing Unit 6202
VoIP, intercom, PA and POTS (Plain old telephone service) interoperability



System

24V DC and/or 230VAC power supply
Digital, analog and VoIP communication
Small cabinet size (585x615x470mm WxHxD)
PA function optional



Maximum capacity standard sized cabinet

72 analog telephone lines
4 trunk lines
1 PA interface
24 VoIP lines (plus external VoIP switches optional)
Digital intercom within total of 72 lines

Maximum capacity 19" rack

No limits



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Centers of Excellence
Houston, Rotterdam, Singapore, Tokyo