VINGTOR STENTOFON













ACM

ANALOG TELEPHONE SYSTEM INTEGRATED COMMUNICATION SYSTEM ADVANCED COMMUNICATION SYSTEM



Vingtor-Stentofon products are developed by the Zenitel Group and includes a range of high quality communications equipment and systems. Being in business since 1901, Zenitel's products are recognized globally for offering high quality communications for both offshore and onshore installations. Primary system offering within the Vingtor-Stentofon portfolio are Public Address and Intercom. Zenitel and the company's global partner network, also integrate these systems with other security devices; including Radio, CCTV, Access Control and Alarm for a comprehensive security solution.

Vingtor-Stentofon is world-renowned for its extensive knowledge in the design, construction, installation and maintenance of integrated marine communication systems. Leveraging our long-term experience serving the maritime industry, we offer an impressive portfolio and provide cutting edge solutions to vessels worldwide under the brand name of Vingtor-Stentofon. The Vingtor-Stentofon brand underpins our reputation as a supplier of the most flexible, reliable and advanced communication systems available today.

MEETING YOUR REGULATORY REQUIREMENTS

All Vingtor-Stentofon products that form a part of critical communication have been tested according to IEC 60945, IEC 60533 standards, and comply with SOLAS regulations and codes relevant to on-board communication systems. Our systems are delivered in accordance with the rules of all major classification societies.

FOR ALL YOUR SALES & AFTER SERVICE REQUIREMENTS

Vingtor-Stentofon is a specialist provider of spare parts, repairs, maintenance contracts and refit solutions. Responsibility and availability are our guidelines and customer support and service a first priority.





















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COMMUNICATION SYSTEMS

The Vingtor-Stentofon ACM system unites and enhances a vessel's safety systems by providing outstanding on-board communication. The ACM solutions have three main system variants.

These are:

- ACM Analog Telephone System
- ACM Integrated Communication System
- ACM Advanced Communication System

The ACM systems provide reliable, robust and proven communication solutions. The systems have been continuously developed and enhanced to take advantage of new technologies such as IP Networking. The different ACM systems are built around the AlphaCom XE intercom server/exchange. The AlphaCom server/exchange is an advanced communication switch designed to meet the growing needs of internal and external communication onboard marine vessels. The server/exchange features advanced functions such as 1-bit audio technology (20 kHz audio), IP switching, Web services, and a wide range of integration options.

AlphaCom XE is a modular platform, supporting IP as well as analog telephones and networking. This modularity and flexibility is reflected in our product portfolio comprising various system packages. These system packages fulfill the requirements of all vessels types, from small conventional vessels to large advanced ships. (See table on page 5 for a list of capabilities for the different ACM systems.)

FEATURES

- Typed approved solution for Two-Way handsfree voice communication and Talk-Back, Public Address and General
- Three main system packages: ACM Analog Telephone System, ACM Integrated Communication System with PA and GA Solution, ACM Advanced Integrated Communication System
- 1-bit audio technology (20 kHz) ensures correct communication
- Modular and flexible systems supporting all vessel types
- Supports IP DECT and wireless handsets
- Supports IP, digital & analog telephones, and networking
- Redundant power input with auto-switchover between AC and DC power
- Supports remote services using IP and Web technologies

APPROVALS

The ACM system is tested according to IEC 60945, and is type approved by DNV-GL, RMRS, CCS, Rina, PRS, CRS, LR, ABS.



















VINGTOR-STENTOFON

CATEGORIES	ACM ANALOG TELEPHONE SYSTEM	ACM INTEGRATED COMMUNICATION SYSTEM	ACM ADVANCED COMMUNICATION SYSTEM
EMERGENCY COMMUNICATION			
Two-way communication according to marine requirement	X	Х	X
Two-way handsfree voice communication according to marine requirement		Х	X
Vingtor-Stentofon integrated Public Address and General Alarm system		Х	X
Public Address interface	X	X	X
ACM STATIONS			
Analog telephones	X	X	X
DECT cordless telephones	X	X	X
Analog Intercom Stations	Max. 5	X	X
Analog Intercom as PA/GA device		X	X
IP Intercom Stations	Max. 12	Max. 12	X
SUPPLEMENTARY FUNCTIONS			
Billing Administration	X	X	X
General PBXs functions	X	X	X
Wireless Paging system via serial ESPA444	X	X	X
Structured cabling system (CAT6A) for high speed data		Х	X
Data network (LAN) switches		X	X
Automatic switchover to emergency power	X	X	X
Remote system management, supervision and service via IP network	X	Х	X
External communication via Satellite, V-Sat, and GSM	X	Х	X
Cisco integration	X	X	X



ACM-M-A-V2 ANALOG TELEPHONE SYSTEM

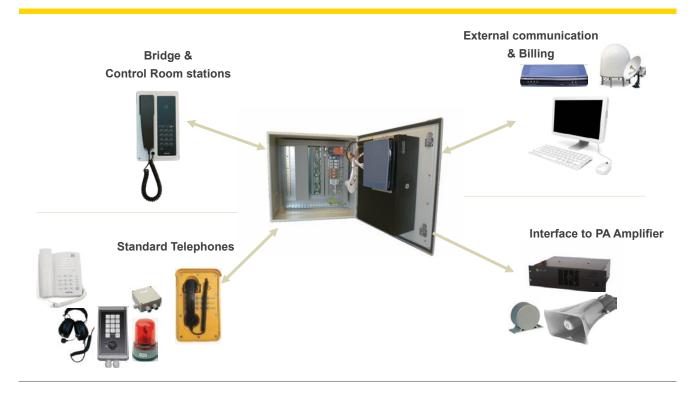
The ACM-M-A-V2 is a PBX made for the marine environment. The exchange is based on the well proven ACM solution. The system features the latest technologies such as high capacity line cards, remote management and maintenance using IP, and Web technologies as well as VoIP gateways. An optional gateway provides a flexible interface to analog and digital telephone trunks with 2, 4, and 8 channels.

The exchange is available in variants with capacity ranging from 24 to 60 subscribers. It is housed in a wall-mounted cabinet which is optimized for easy installation and maintenance. All connections are easily accessible from the front. The exchange is powered from an AC and/or DC power supply and features automatic switchover.

The PBX has an interface for connection to a Public Address system. Access to the Public Address interface is programmable.

FEATURES

- PBX made for the Marine environment
- Extensive and programmable features supporting all key PBX functions
- Supports remote management and maintenance using IP and Web technologies
- Supports Public Address (PA) calls via interface to PA systems
- Supports IP DECT and wireless handsets
- External communication (GSM and analog) and billing
- Redundant power input with autoswitchover between AC and DC power
- Supports the Billing system





ACM M-A-V2 **TELEPHONE FXCHANGES**



- For wall mounting
- Powered by 230 VAC main and 24V DC Emergency, 230V AC main / 230V AC from UPS
- 115V version on request
- Max power 150W
- Automatic switch over between mains and emergency or 230V AC UPS
- Temperature range 0 55°C (recommended 18 - 25°C)
- Subscriber capacity; 60 analog telephones
- PA interface 0 dB/600Ω audio
- External interface and billing: Option analog telephone gateway, Option GSM telephone gateway, Option VINGTOR-STENTOFON Billing system
- Protection class IP-22

3006204046

ACM-M-A24/2-V2 PBX FOR 5+24 **EXTENSIONS AND 1 PA INTERFACE,** 24VDC AND 230V AC

- 1x AMC-IP
- 5 traditional lines (4-wire) 1xASLT-2
- 24 analog lines (2-wire) preinstalled 2xATLB-12
- Interface to PA
- 2 analog trunks (230VAC only)
- 1 x MP-114 Gateway



3006204048

ACM-M-A36/2-V2 PBX FOR 5+36 **EXTENSIONS AND 1 PA INTERFACE, 24VDC AND 230V AC**

- 1x AMC-IP
- 5 traditional lines (4-wire) 1x ASLT-2
- 36 analog lines (2-wire) preinstalled 3xATLB-12
- Interface to PA
- 2 analog trunks (230VAC only)
- 1 x MP-114 Gateway



Size (WxHxD): 600 x 600 x 350 mm Weight: 45 kg

Additional Information: Delivered with standard program and documentation for customized programming /documentation ACM/PROG must be added

3006204051

ACM-M-A48-V2 PBX FOR 5+48 **EXTENSIONS AND 1 PA INTERFACE. 24VDC AND 230V AC**

- 1x AMC-IP
- 5 traditional lines (4-wire) 1x ASLT-2
- 48 analog lines (2-wire) preinstalled 4xATLB-12
- Interface to PA

Size (WxHxD): 600 x 600 x 350 mm Weight: 45 kg

Additional Information: Delivered with standard program and documentation for customized programming /documentation ACM/PROG must be added

3006204053

ACM-M-A60-V2 PBX FOR 5+60 EXTENSIONS AND 1 PA **INTERFACE, 24VDC AND 230V AC EQUIPPED WITH:**

- 1x AMC-IP
- 5 traditional lines (4-wire) 1x ASLT-2
- 60 analog lines (2-wire) preinstalled 5xATLB-12
- Interface to PA





Size (WxHxD): 600 x 600 x 350 mm Weight: 45 kg

Additional Information: Delivered with standard program and documentation for customized programming /documentation ACM/PROG must be added

Size (WxHxD): 600 x 600 x 350 mm Weight: 45 kg

Additional Information: Delivered with standard program and documentation for customized programming /documentation ACM/PROG must be added



ACM INTEGRATED COMMUNICATION SYSTEM

The ACM Integrated Communication System is specially designed for use onboard marine vessels. The system is based on the AlphaCom XE platform featuring the latest digital technologies such as IP telephony, Web management and IP switching.

The system supports the integrated SPA PA&GA solution. Together with the SPA, the system is extremely cost efficient where SPA loudspeaker loops are used together with the ACM intercom stations. The ACM intercom stations are type approved as integrated PA, GA, telephone, and talk-back units.

The ACM solution supports a wide range of analog, IP and wireless communication terminals made for the marine environment. IP DECT base stations connect directly to the exchange over IP, providing a very cost efficient solution for deploying a wireless network onboard.

The DECT telephones, IP telephones, and intercom stations have all access to the same set of ACM features. Users will be able to benefit from full accessibility as well as seamless mobility as they can always be contacted regardless of their location on the vessel.

FEATURES

- Integrated PA and GA solution
- Wide range of audio stations and signal units
- Optional External communication: analog telephone gateway and GSM
- Supports the Billing System
- Remote management and maintenance using IP and Web technologies
- Redundant power input with switchover
- 1-bit digital audio technology
- Typed approved solution for two-way communication, talk-back, Public Address & General Alarm for all vessel types
- Extensive set of features for PBX and emergency communication





ACM INTEGRATED SYSTEM RACKS

1150100002

ACM-M-D-V2 SYSTEM RACK

- Wall mounting
- 8 port switch (6 ports PoE + 2 ports std.) for external equipment, 1 port reserved for AlphaCom connection
- Each exchange can power one additional optional injector kit.
- Prewired for 6 subscriber cards
- Power 230V AC with automatic switch over to 230 VAC UPS or 24V DC Emergency
- 115VAC version on request
- Integrated PA/GA interface (2 inputs, 2 audio ch. Out, 1 audio ch. In)
- 6 relay outputs / 6 potentially free



Size (WxHxD): 600 x 600 x 350 mm Weight: 45 kg

Additional Information: Delivered with standard program and documentation. For customized programming /documentation ACM/PROG must be added. IP-22

1150100014

AACM-144 V10 SYSTEM RACK

- Floor mounting
- 8 port switch (6 ports PoE + 2 ports std.) for external equipment, 1 port reserved for AlphaCom connection
- Each exchange can power one additional optional injector kit.
- Powered for 23 subscriber cards
- Power 230V AC with automatic switchover to 230V AC emergency
- 24 relay outputs
- Integrated PA/GA interface (6 inputs, 4 audio channels Out, 6 audio channels In)(PA zone selection require custom programming)



Size (WxHxD): 800 x 1250 x 600 mm Weight: 180 kg

Additional Information: Delivered with standard program and documentation. For customized programming /documentation ACM/PROG must be added. IP-20

1150100010

ACM-48-V10 SYSTEM RACK

- Wall or floor mounting
- 8 port switch (6 ports PoE + 2 ports std.) for external equipment, 1 port reserved for AlphaCom connection
- Each exchange can power one additional optional injector kit.
- Prewired for 11 subscriber cards
- Power 230V AC with automatic switchover to 230V AC emergency
- 115VAC version on request
- 12 relay outputs
- Integrated PA/GA interface (6 inputs, 4 audio channels Out, 6 audio channels In)
- (PA zone selection require custom programming)



Size (WxHxD): 600 x 746 x 573 mm Weight: 70 kg

Additional Information: Delivered with standard program and documentation. For customized programming /documentation ACM/PROG must be added. IP-22

> Note! 24V DC emergency for:

ACM-48-V10 Use inverter min 750VA

ACM-144-V10 Use inverter min 1500VA

AACM-144 V10 Use inverter min 1500VA

See page 16 for optional inverters

1150100012

ACM-144-V10 SYSTEM RACK

- Floor mounting
- 8 port switch (6 ports PoE + 2 ports std.) for external equipment, 1 port reserved for AlphaCom connection
- Each exchange can power one additional optional injector kit.
- Prewired for 17 subscriber cards
- Power 230V AC with automatic switchover to 230V AC emergency
- 18 relay outputs
- Integrated PA/GA interface (6 inputs, 4 audio channels Out, 6 audio channels In) (PA zone selection require custom programming)



Size (WxHxD): 800 x 1250 x 600 mm Weight: 180 kg

Additional Information: Delivered with standard program and documentation. For customized programming /documentation ACM/PROG must be added. IP-20



ACM ADVANCED COMMUNICATION SYSTEM

The ACM Advanced Communication System offers a complete system for Communication, Data, Safety, and Entertainment. The system comes with benefits such as reduced costs in infrastructure, more efficient operation, improved user experience and the security of type approved and certified systems.

The function modules are integrated and assembled into 19" racks specially made for the marine environment. With the modular building platform, the system can be expanded to provide audio and data communication for 30 to over 1000 users.

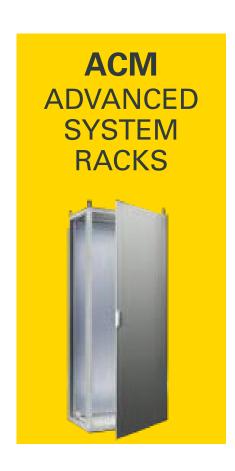
The ACM Advanced Communication System provides a type approved structured cabling system (CAT-6A) as the backbone. With its advanced wiring and patch solution, the system supports all-inone cabling. This solution results in a significant reduction in cabling infrastructure where a single (CAT-6A) cable can provide telephony (analog or IP), General Alarm, Public Address, internet access, and IPTV to a cabin.

FEATURES

- Made for marine environment
- New modular building platform
- Advanced integration options
- Data network infrastructure
- Advanced cabling solution
- Integrated PA & GA distribution
- Wide range of audio terminals and signal units
- External communication and billing
- Remote management and maintenance using IP and Web technologies
- Redundant power input with switchover







CABINETS INDOOR

System benefits

Standard cabinet comes in the most common sizes. All cabinets are assembled with fixed 19" frame and ready for Vingtor-Stentofon building modules. These cabinets suitable for Marine applications. ΑII cabinets include grounding two bars, cable inlet in bottom, mounting base and thermostat controlled ventilation fan in the steel door.

- Material Steel
- Color RAL 7035
- Floor mounted
- Cable inlet bottom (Cable inlet top available on request)

2810010051

CAB24FW PRE-ASSEMBLED CABINET FLOOR 19" 24 HU 800X1350X600 MM, FIXED FRAME. IP-22, W/VENTILATION

2810010052

CAB24FWD PRE-ASSEMBLED CABINET FLOOR 19" 24 HU 800X1350X800 MM, FIXED FRAME, IP-22, W/VENTILATION

2810010053

CAB42F PRE-ASSEMBLED CABINET FLOOR 19" 42 HU 600X2150X600 MM FIXED FRAME, IP-22, W/ **VENTILATION**

2810010054

CAB42FW PRE-ASSEMBLED CABINET FLOOR 19" 42 HU 800X2150X600 MM FIXED FRAME, IP-22, W/VENTILATION

2810010055

CAB42FWD PRE-ASSEMBLED **CABINET FLOOR 19" 42 HU** 800X2150X800 MM FIXED FRAME, IP-22, W/VENTILATION

1159607200

ACM-XE7 MODULE

- Max 36 traditional intercom
- Max 72 analog telephones
- Max 552 IP intercoms, IP telephones or IP DECT handsets
- Delivered with standard programming and documentation - programming and engineering for project customizing.
- Equipped with AlphaCom AMC-IP Board, 1009202000 1009296100 STIC for XE1/ XE7

1159620200

ACM-XE20 MODULE

- Max 102 traditional intercoms
- Max 204 analog telephones
- Max 552 IP intercoms, IP telephones or IP DECT handsets
- Delivered with standard programming and documentation - see programming and engineering for project customising.
- Equipped with: AlphaCom AMC-IP Board, 1009202000 AlphaCom AMC-IP Filter Board, 100951100 APC AlphaCom program & CLOCK, 1009301000 AlphaCom Filter Board APC - FB, 1009503000 Power supply 230 VAC -MK2, 1009703000

Fan module, 1009296200 STIC for XE20 / XE26

1159626200

ACM-XE26 MODULE

- Max 138 traditional intercoms
- Max 276 analog telephones
- Max 552 IP intercoms, IP telephones or IP DECT handsets
- Delivered with standard programming and documentation - see programming and engineering for project customising.
- Equipped with: AlphaCom AMC-IP Board, 1009202000 AlphaCom AMC-IP Filter Board, 100951100 APC AlphaCom program & CLOCK, 1009301000 AlphaCom Filter Board APC - FB, 1009503000 2x Power supply 230 VAC -MK2, 1009703000 Fan module, STIC for XE20 / XE26



Size (WxHxD): 427 x 133 x 380 mm Weight: 9.0 kg

Additional Information: Assembly included Power supply 2990000033 CPM-SNT-250-10 100-240VAC/24VDC 10A needed



Size (WxHxD): 482 x 265 x 365 mm Weight: 19 kg

Additional Information: Assembly included



Size (WxHxD): 482 x 841 x 365 mm Weight: 39 kg

Additional Information: Assembly included



ACM ADVANCED ACCESSORIES

- Patch panels
- PA Interface
- Internal cables

1151101002

POWER MODULE 230V AC MAIN + 230V AC EMERGENCY TYPE B

- Automatic switchover function
- 15 power outlets
- 6 automatic fuses

MARITIME LAN PP 24P BLACK -EMPTY V2

BC-13-203 BERGEN CABLING

- 19" Patch panel 1 HU of solid stainless steel - 24 norts
- Front adjustable from flush to 7 cm rear
- Heavy duty solution for maritime and offshore installations with good distance from fastening the cable to the snap in connector
- · Clip-on mechanism: enhanced strain relief
- Extra tightening mechanism for the snap-ins for vibrations resistance
- Labelling strip included

2810050023



Size 19" 1HU

Size (WxHxD): mm Weight: kg

Additional Information: Assembly included Switch over to 24V DC emergency on request

1153100001

VA-110 CARD CASSETTE

- · Eurocard cassette for Multi relay board VA-502 and Filterboard VA-503
- Equipped with Fuseboard VA-111-2
- Required for PA and relay functionality
- 9 slots available

1009501041

FILTER BOARD RJ45 - ONE NEEDED PER ASLT2, ATLB FOR ACM-E20 AND E26

- Allows direct connection of a CAT5 installation cable to the back of the exchange
- One needed per ASLT2, ATLB for ACM-XE20

ACM-XE26 modules



Size (WxHxD): 73 x 141 x 16 mm Weight: 0.1 kg

Size: 19" 3HU

Additional Information: Assembly cost included. Additional 9 slots available by using 1020604300

6 RELAY OUTPUTS

Consist of 1x Multi relay board VA-502



1153100002

BASIC PA INTERFACE

- Support All Call from ACM panel to SPA and from SPA panel to ACM
- Consist of 1x VA-503 Filter board



1153100003

EXTENDED PA INTERFACE

- Support All Call + 5 zones from ACM panel to SPA and All Call from SPA panel to ACM
- Consist of 1x Multi relay board VA-502 and 1x Filterboard VA-503





Size: Standard europe card

Additional Information: Assembly cost included Take 1 slot in eurocard cassette

Size: 2x Standard europe card

Additional Information: Assembly cost included Take 2 slot in eurocard cassette

Size: Standard europe card

Additional Information: Assembly cost included Take 1 slot in eurocard cassette

1153100005

BASIC PA INTERFACE - A/B LOOP

- Support All Call from ACM panel to SPA and from SPA panel to ACM
- Consist of 2x VA-503 Filter board





1153100006

EXTENDED PA INTERFACE - A/B LOOP

- Support All Call + 5 zones from ACM panel to SPA and All Call from SPA panel to ACM
- Consist of 2x Multi relay board VA-502 and 2 x Filterboard VA-503









Size: 2x Standard Europe card

Additional Information: Assembly cost included Take 2 slot in eurocard cassette

Size: 4x Standard europe card

Additional Information: Assembly cost included Take 4 slot in eurocard cassette



PA AND GA REDUNDANT CONTROL **UNIT MAIN CLASS**

- Type approved solution for PA and GA according to requirements from DNV,GL, Rina, BV and ABS
- Support 6 PA zones and 2 SPA microphone
- Support integrated PA and GA using ACM intercom stations
- Consist of 1x 2HU unit & 1 x 1HU unit





CONVENTIONAL PA CONTROL UNIT

- Type approved PA solution for conventional vessel
- Support 6 PA zones and 2 SPA microphone
- Support integrated PA using ACM intercom stations
- Mounting in 19" rack



1008095100

IP-ARIO AUDIO REMOTE I/O UNIT

- PA Interface over IP
- Radio Interface over IP
- Remote I/O unit over IP
- Remote AlphaCom RS232 port over IP
- Integrated 2-port Ethernet switch
- PoE and/or 24VDC powered



Size (WxHxD): 210 x 44 x 240mm Weight: 1.5kg

Additional Information: Bracket needed for 19" rack mount-

2810011001

BRACKET FOR 19" MOUNTING OF SINGLE IP-ARIO



Size: 19" 2HU & 19" 1HU

Additional Information: Assembly included

Size: 19" 2HU

Additional Information: Assembly included

Size (WxHxD): 254 x 42 x 42mm Weight: 0,3 kg

1152100003

PA AND GA REDUNDANT CONTROL UNIT (DNV)

- Type approved solution for PA and GA according to requirements from DNV
- Support 6 PA zones and 2 SPA microphone
- Support integrated PA and GA using ACM intercom stations
- Consist of 2x 2HU units





1152100005

PA AND GA REDUNDANT CONTROL **UNIT PASSENGER CLASS**

- Type approved solution for PA and GA according to requirements from DNV,GL, Rina, BV and ABS
- Support 6 PA zones and 2 SPA microphone panels
- Support VINGTOR integrated PA and GA using ACM intercom stations
- Consist of 1x 2HU unit & 1 x 1HU unit

1152100004

LOUDHAILING LOGIC WITH INTERFACE TO ACM MODULE

- Includes connection for one SPA-M1 microphone panel Command system
- Require separate amplifier
- Can be a part of all-call

Related items: Cable and assembly included





1152101000

EXTRA TERMINAL WITH WIRING -WEIDMUELLER

 One unit of above needed for each termination point



Related items: Cable and assembly included

Size: 2x 19" 2HU

Additional Information: Assembly included

Size: 19" 2HU & 19" 1HU

Additional Information: Assembly included. The passenger class require 1 set in each A and B rack



ACM COMMON ACCESSORIES



SUBSCRIBER, FEATURE CARDS & GATEWAYS

Add extra features and functionality to your ACM XE Servers with Feature Cards.

SIP, Analog & GSM Gateways

1009505000

FBSAR, FILTER BOARD AND SPEECH ADAPTER WITH RELAY

- Analog interface board to Public Address (PA system or to non-selective radio system
- Includes relay for controlling the PA system or keying the radio transmitter
- Two channels, the first channel supports both input and output signals and is suitable both as PA and mobile radio interface. The second channel is output only and is suitable for PA interface
- Connects to subscriber (ASLT) line
- Galvanic separation between the audio server and the external equipment



Size (WxHxD): 95 x 100 x 25 mm Weight: 0.1 kg

Additional Information: Rack installation; additional assembly cost may apply

1009101010

ASLT2 - SUBSCRIBER LINE BOARD - SUPPORTS 6 ANALOG INTERCOM STATIONS

- 6 channels for analog intercom subscriber connections per card
- 6 programmable remote outputs

1009104000

ATLB12 - SUBSCRIBER LINE BOARD - SUPPORTS 12 ANALOG TELEPHONES

- High capacity line card for analog telephones
- 12 analog telephone connections
- Hotline and DTMF dialling
- 6 programmable remote outputs

1153200052

MRBD MULTI RELAY BOARD WITH 6 RELAY ACM ADVANCED

- Relay board for control of external equipment, such as door opening, additional call indication, CCTV control etc.
- Equipped with 6 relays, each with two-poled change over contacts
- The relays are controlled by outputs in the exchange or from the RIO unit (RIO unit available on request)







Size (WxHxD): 230 x 263 x 10 mm Weight: 0.5 kg

Additional Information: 1009505000 FBSAR, filter board and speech adapter with relay

Size (WxHxD): 230 x 263 x 10 mm Weight: 0.5 kg

Size (WxHxD): 123 x 78 x 32mm Weight: 0.1kg

Additional Information: 1151004050 Multi relayboard for ACM standard



MP-114 ANALOG MEDIA GATEWAY -FXO 4-PORT - 100-240VAC - LICENSE

- Connects ACM system to the public telephone network
- Supports 4 analog telephone lines
- Web management for easy configuration and installation
- Include assembly

3006204099

MP-118 ANALOG MEDIA GATEWAY -FXO 4-PORT - 100-240VAC - LICENSE

- Connects ACM system to the public telephone network
- Supports 8 analog telephone lines
- Web management for easy configuration and installation
- Include assembly





Size (WxHxD): 220 x 42 x 172 mm Weight: 0.5 kg

Additional Information: Add 1pcs. 1153200006 Patch Cable for SIP & ISDN Gateway

1150102103

MP-11X GATEWAY MOUNTING KIT FOR ACM ADV. W/WIRING & ASSEM

Allows mounting in standard 19" rack



Size: 19" 1HU

Additional Information: Includes 2370102000, wiring and assembly.

3006204002

92522 GSM GATEWAY - QUAD BAND 850/900/1800/1900 MHZ

- · Connects the exchange to GSM for external calls
- GSM coverage using quad band GSM (850/900/1800/1900 MHz)
- 110 265VAC



Size (WxHxD): 205 x 27 x 124 mm Weight: 0.75 kg

Additional Information: For use with FXO gateways

Size (WxHxD): 220 x 42 x 172 mm Weight: 0.5 kg

Additional Information: Add 1pcs. 1153200006 Patch Cable for SIP & ISDN Gateway

1150102101

MP-11X GATEWAY MOUNTING KIT FOR ACM-M-X-V2 INCL. ASSEMBLY

• To be mounted on top of the exchange



Size: WxHxD): 246 x 130 x 7 mm Weight: 0,375 Kg

Additional Information: Include: 2370102001 and assembly

2200003000

MV370 GSM MEDIA GATEWAY -QUAD BAND (800/900/1800/1900 MHZ)

- Connects the exchange to GSM for external calls
- GSM coverage using quad band GSM (800/900/ 1800/1900 MHz)
- Web interface for configuration
- 12 VDC (230 VAC using power adaptor)

Size (WxHxD): 145 x 173 x 45 mm Weight: 1,2 kg

Additional Information: Need SIP trunking license Can not be used in combination with billing v.1.2

1150102102

MP-11X GATEWAY MOUNTING KIT FOR ACM-V10 INCL. ASSEMBLY

• For mounting on top of ACM-48-V10 or on the backplane of AACM-/ACM-144-V10.



Size: WxHxD): 225 x 155 x 2 mm Weight: 0.22 Kg

Additional Information: Include: 2370202001 and assembly

3006204153

GSM DUAL BAND WITH VOICE & FAX TERMINAL

- Dual band Voice and FAX terminal (900/1800MHz)
- Supports all normal telephone functions
- 220-230 VAC



Size (WxHxD): 100 x 27 x 100 mm Weight: 0.110 kg

Additional Information: For use stand alone, Fax or Voice with FXO gateways



92580 GSM MULTIBAND ANTENNA + 10M CABLE & BRACKET

- Antenna for GSM900, GSM1800, PCS1900, 3G UMTS
- Frequency range: 890-960, 1710-1880, 1900-2170MHz.
- Fibre glass and Stainless Steel



Size Antenna (WxH): 25 x 445 mm Weight: 0.5 kg

Additional Information: Includes adapter cable and connectors

2990050011

ODS-750EU INVERTER 750VA 24 VDC TO 230 VAC APPROX.645W

- Sine wave output voltage
- Selectable output frequency: 50/60Hz
- Adjustable output voltage
- High input-output isolation 3000Vrms
- Remote inhibit
- Three-phase
- Immunity according EN61000-6-2 (EN50121-3-2)
- Emissions according EN61000-6-4 (EN50121-3-2)



3006204006

92590 GSM MULTIBAND ANTENNA + 20M CABLE & BRACKET

- Antenna for GSM900, GSM1800, PCS1900, 3G UMTS
- Frequency range: 890-960, 1710-1880, 1900-2170MHz.
- Fibre glass and Stainless Steel



Size Antenna (WxH): 25 x 445 mm Weight: 0.5 kg

Additional Information: Includes adapter cable and con-

2990050012

ODS-1500EU INVERTER 1500VA 24 VDC TO 230 VAC APPROX.1300W

- Sine wave output voltage
- Selectable output frequency: 50/60Hz
- Adjustable output voltage
- High input-output isolation 3000Vrms
- Remote inhibit
- Three-phase synchronization
- Remote control via RS232
- Alarm by isolated relay contacts
- Remote off opto-coupled
- Immunity according EN61000-6-2 (EN50121-3-2)
- Emissions according EN61000-6-4 (EN50121-3-2)



2990050013

ODS-3000EU INVERTER 3000VA 24 VDC TO 230 VAC APPROX.2135W

- Sine wave output voltage
- Selectable output frequency: 50/60Hz
- Adjustable output voltage
- High input-output isolation 3000Vrms
- Remote inhibit
- Three-phase synchronization
- Remote control via RS232
- Alarm by isolated relay contacts
- Remote off opto-coupledImmunity according
- EN61000-6-2 (EN50121-3-2)
- Emissions according EN61000-6-4 (EN50121-3-2)



Size (WxHxD): 130 x 50 x 270 mm Weight: 1,95 kg

Additional Information: For rack installation 2990050021 120 VAC version

Size (WxHxD): 160 x 64,5 x 351 mm Weight: 3,8 kg

Additional Information: For rack installation 2990050022 120 VAC version

Size (WxHxD): 193,5 x 78,5 x 387 mm Weight: 6,0 kg

Additional Information: For rack installation 2990050023 120 VAC version



VPA AMPLIFIERS

For 19" rack mounting require 1HU or 3HU ventilation blind panel for each amplifier when mounted in rack higher than 3HU

- Power amplifier in a 19" rack cabinet
- 100 V and 8 ohm output
- Dual inputs with priority switching
- Temperature controlled, forced backto-front ventilation
- 115/230 VAC mains and 24 VDC battery backup
- Pilot tone load monitoring
- 24 VDC / 800 mA power output for external equipment



3005010235

VPA-120 POWER AMPLIFIER, 120W

- Power consumption at 0dB 24V DC 7,5 A
- Power consumption at 0dB 230V AC 1.7 A



Size (WxHxD): 482 x 133 x 420 mm Weight: 18.2 kg

Additional Information: Tested according to IEC 60945, IACS E10, IEC 60533

3005010239

VPA-400 POWER AMPLIFIER, 400W

- Power consumption at 0dB 24V DC 28,0 A
- Power consumption at OdR 230V AC 5.4 A



Size (WxHxD): 482 x 133 x 420 mm Weight: 24.2 kg

Additional Information: Tested according to IEC 60945, IACS E10, IEC 6053

3005010237

VPA-240 POWER AMPLIFIER, 240W

- Power consumption at 0dB 24V DC 15,4 A
- Power consumption at 0dB 230V AC 3.1 A



Size (WxHxD): 482 x 133 x 420 mm Weight: 18.2 kg

Additional Information:

Tested according to IEC 60945, IACS E10, IEC 60533

1152000001

VPA-120 Poweramplifier, 120W with assembly included

1152000002

VPA-240 Poweramplifier, 240W with assembly included

1152000003

VPA-400 Poweramplifier, 400W with assembly included

3006206019

RS-3C RACK 3HU, TERMINALS F/230VAC/24VDC IN/OUT

- 19" 3HU cabinet,
- Prepared for amplifier VPA 120, VPA 240 and VPA 400 with all necessary terminals for external
- 230 VAC / 24 VDC in and out signals



3005010052

P5201-D VENTILATION PANEL, 1HU PASO

3005010053

P5203-D VENTILATION PANEL, 3 **HU PASO**

3005010059

P8013-D PANEL BLANK, PASO 3HU

Size (WxHxD): 520 x 450 x 180mm Weight: 6.0 kg

Additional Information: Prepared with necessary terminals for signal in/out and power supply. Assembly included



DATA SWITCHES FOR ACM

Dataswitches designed for use in Vinfgtor-Stentofon ACM solutions.

For complete range of dataswitches, see:

www.vingtor-stentofon.com

2370902001

CC2960BRCT 19" BRACKET KIT FOR CATALYST 2960 SWITCHES FLUSH

1,5mm thick alu-zink treated steel

Size (WxHxD): 18,8 x 44 x 140mm Weight:

Additional Information: Supplied in set of two

1154003100

4 PORT POE SWITCH AND 1 REGULAR ETHERNET PORT W/ POWER SUPPLY

- Unmanaged 10/100 Mb switch
- 4 PoE ports + 1 standard 10/100 Mb port
- Support PoE for powering IP intercom, IP telephone and IP DECT base stations
- Power supply
- Input AC voltage 85 264VAC
- Input DC voltage 120 370VAC
- Output DC voltage 48VDC



(WxHxD): 25 x 100 x 82 mm Weight: 0.17 kg

(WxHxD): 55 x 125 x 100 mm Weight: 0.6 kg

Additional Information: 1x Patch cable ACM-E5/2 and assembly included. Required for IP DECT and IP Telephones

1154003102

8 PORTS SWITCH W/6 PORTS POE INJECTOR WITHOUT POWER SUPPLY

- 8 port DIN mount industrial switch
- 6 port PoE injector
- Patch cables
- Pre-made power cable for injector
- Spare fuses (2 pcs.)

1154003103

8 PORTS SWITCH W/6 PORT POE INJECTOR WITH 24-48V DC POWER

- 8 port DIN mount industrial switch
- 6 port PoE injector
- 24V to 48Vdc power supply
- Patch cables
- Pre-made power cable for injector
- Spare fuses (2 pcs.)







Size (WxHxD): Weight: 0.553 kg

Additional Information: Require preexisting injector installed with power supply

Size (WxHxD): Weight:

Additional Information: Each included power supply can drive one additional injector. Assembly & wiring included

1154002100

DATA SWITCH - 5 X PORTS ETHERNET SWITCH ECON 2050 -DIN MOUNTED

- Unmanaged 10/100 Mb switch
- DIN mounted
- Data switch for connecting ACM exchanges in multi-module configuration or to other IP-modules



Size (WxHxD): 46.5 x 25.5 x 105.4 mm Weight: 0.15 kg

Additional Information: 1x Patch cable ACM-E5/2 and assembly cost included



CONNECTION OF IP STATIONS BY USING FLOWIRE TECHNOLOGY

Vingtor-Stentofon offers a comprehensive range of IP intercom solutions for indoor, outdoor and Ex proof environment

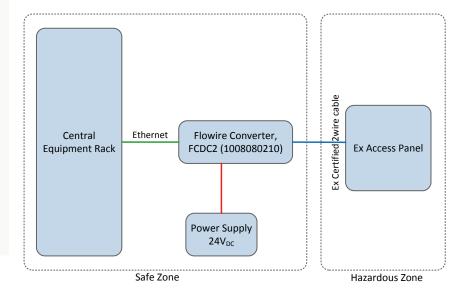
IP intercom stations offer numerous advantages over their analog counterparts, such as minimal installation requirements, and remote software upgrades

The IP Ex intercom stations must use Zenitel Flowire technology

CONNECTION TO CENTRAL FOR EX PROOF **STATIONS**

The Ex Products are connected to the central equipment rack using Ex certified 2-wire cables. A Zenitel proprietary protocol, Flowire, is used to extend the Ethernet connection and support power distribution on the 2-wire cabling infrastructure.

To support the Flowire interface, the central equipment rack must be equipped with a Flowire Converter (FCDC2). See chapter Dataswitches for Flowire FCDC2 and 24V dc powersupplies



1008080210

FCDC2 FLOWIRE ETHERNET CONVERTER, DC VOLTAGE

- One single pair of cable can be used to distribute power and data
- The cable hauls can be longer, up to 2 km, reducing the need for switches and/or repeaters
- Up to 10 Flowire devices can be connected to the same 2-wire cluster star topology
- · Existing infrastructure can be used, even though only a single pair is available. This reduces the total cost of retrofit projects
- The Flowire converter can be used with any Ethernet enabled device (not limited to Vingtor-Stentofon products)
- Protection IP-20 IMPOTRANT:
- 24V DC non-PoE for Ex equipment
- 48V DC non-PoE for other IP-Stations



Size (WxHxD): 110 x 66 x 17 mm Weight: 0.3 kg

2990102120 Flowire EX 120 Powerbox PSU, 24V DC, 120W 2990102240 Flowire EX 250 Powerbox PSU, 24V DC, 250W

2990102120

FLOWIRE EX 120 POWERBOX PSU, 24VDC 120W

- EN60945 compliant
- Universal input (90 265 Vac)
- Efficiency above 90%
- Active Power Factor Correction
- Adjustable output
- Overload and overvoltage protection
- Thermal overload protection
- Conformal coating
- DC OK signal and potential free contact
- Cooling by free air convection
- RoHS compliant
- Internal redundancy diode
- Single or parallel mode user selectable



Size (WxHxD): 132 x 37 x 128 mm Weightt: 0,92 kg

2990102240

FLOWIRE EX 250 POWERBOX PSU, 24VDC, 250W

- EN60945 compliant
- Universal input (90 265 Vac)
- Efficiency above 90%
- Active Power Factor Correction
- Adjustable output
- Overload and overvoltage protection
- Thermal overload protection
- Conformal coating
- DC OK signal and potential free contact
- Cooling by free air convection
- RoHS compliant
- Internal redundancy diode
- Single or parallel mode user selectable



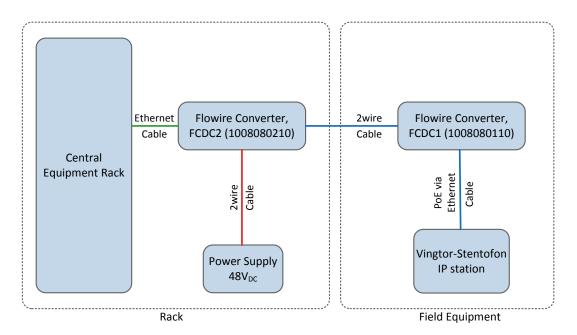
Size (WxHxD): 132 x 50 x 128 mm Weight 1,2 kg



OPTIONAL CONNECTION TO CENTRAL FOR TURBINE AND OTHER IP STATIONS

The IP stations are connected to the central equipment rack using 2-wire cables. A Zenitel proprietary protocol, The Flowire in this case, is used to extend the Ethernet connection and support power distribution on the 2-wire cabling infrastructure.

To support the Flowire interface, the central equipment rack must be equipped with a Flowire Converter (FCDC2). Each PoE station will require their own FCDC1 (see station accessories)



1008080210

FCDC2 FLOWIRE ETHERNET CONVERTER, DC VOLTAGE

- One single pair of cable can be used to distribute power and data
- The cable hauls can be longer, up to 2 km, reducing the need for switches and/or repeaters
- Up to 10 Flowire devices can be connected to the same 2-wire cluster star topology
- Existing infrastructure can be used, even though only a single pair is available. This reduces the total cost of retrofit projects
- The Flowire converter can be used with any Ethernet enabled device (not limited to Vingtor-Stentofon products)
- Protection IP-20 IMPOTRANT:
- 24V DC non-PoE for Ex equipment
- 48V DC non-PoE for Inka & Turbine



Size (WxHxD): 110 x 66 x 17 mm Weight: 0.3 kg

Accessories:

2990102244 Flowire 250 Powerbox PSU, 48V DC, 250W

2990102244

FLOWIRE 250 POWERBOX PSU, 48V DC, 250W

- EN60945 compliant
- Universal input (90 265 Vac)
- Efficiency above 90%
- Active Power Factor Correction
- Adjustable output
- Overload and overvoltage protection
- Thermal overload protection
- Conformal coating
- DC OK signal and potential free contact
- Cooling by free air convection
- RoHS compliant
- Internal redundancy diode
- Single or parallel mode user selectable



Size (WxHxD): 132 x 50 x 128 mm Weight 1,2 kg



CABLE & PATCH EQUIPMENT

For ACM advanced.

The internal cable sets are used to connect the different function modules to the structured cable CAT-7 patch panel. All cables are equipped with RJ45 connectors and labelling and assembly are included.

The system has the following main cable types:

Cable type D:

Standard UTP patch cable Cable type E:

ACM-E-DT/US/I SPLIT STATION

Split station cable for extracting data (Ethernet)

and analog intercom from wall socket CAT6A

CABLE - DATA/INTERCOM

when using cable type A RJ45 connectors Cabin connection

Data / Data split cable

2810050019

BC-11-004 BERGEN CABLING -CONNECTOR CAT 6A STP V2

Single CAT-6A socket for patch panel



Weight: 0.010 kg

Additional Information: For use in 2810050023 BC-13-203 Bergen Cabling Maritime LAN PP 24p Black - Empty v2

2220040027

BC-12-253 BERGEN CABLING -WALLBOX 1 X RJ45 STP CAT 6A V2

 Single network outlet box for either wall or flush mounting



Size (WxHxD): 84 x 84 x 55 mm Weight: 0.080 kg

Additional Information:

2220040006

BERGEN CABLING - DNV APPROVED

- Maritime LAN S/FTB CAT7 cable
- Marine approved network cable



Additional Information: Roll of 500 Mtr.

Length: Data 1.5m / Intercom 2m

Related items: Socket RJ45W-5 or RJ45W-7

3006204030

3006204041

Cable UTP Patch Cable Type D - Length 0.25

Cable UTP Patch Cable Type D - Length 0.50 M

3006204032

Cable UTP Patch Cable Type D - Length $\, 1 \, M$ 3006204034

Cable UTP Patch Cable Type D - Length 2 M 3006204044

Data-Data Split Cable Type E- Length 0.25 M



Illustration photo

2220040028

BC-10-021 BERGEN CABLING -**DNV MARITIME LAN S/FTP CAT6A CABLE**

- Maritime LAN S/FTB CAT6A cable
- Marine approved network cable



Additional Information: Roll of 500 Mtr.

2810050024

BC-11-004-24 BERGEN CABLING -CONNECTOR CAT6A STP V2 24 PCS.

Kit of 24 CAT-6A sockets for patch panel



Weight: 0.240 kg

Additional Information: For use in 2810050023 BC-13-203 Bergen Cabling Maritime LAN PP 24p Black - Empty v2

2810050028

BC-12-254 BERGEN CABLING -WALLBOX 2 X RJ45 STP CAT 6A V2

 Dual network outlet box for either wall or flush mounting



Size (WxHxD): 84 x 84 x 55 mm Weight: 0.090 kg

Additional Information:

2810050009

BERGEN CABLING - RJ45 CAT6A DIN OUTLET COMPLETE

- Single outlet for DIN rail
- For application up to 10 Gigabit Ethernet on solid wires



Size (WxHxD): 18 x 70 x 60 mm

Additional Information: The connector is DNV approved.

2810050014

BERGEN CABLING - KEYSTONE TERMINATION TOOL FOR BC-11-004

- Bergen Cabling Keystone Termination Tool is a press tool for termination of the Bergen Cabling DNV approved Maritime LAN Cat.6A 10 Gigabit connector.
- The tool also cut the wires in the same operation.





BC-13-203 BERGEN CABLING MARITIME LAN PP 24P BLACK -EMPTY V2

- 19" Patch panel 1 HU of solid stainless steel - 24 ports
- Front adjustable from flush to 7 cm rear
- Heavy duty solution for maritime and offshore installations with good distance from fastening the cable to the snap in connector
- Clip-on mechanism: enhanced strain relief
- Extra tightening mechanism for the snap-ins for vibrations resistance
- Labelling strip included



Size 19" 1HU

PATCH CABLES & INTERNAL CABLES

The internal cable sets are used to connect the different function modules to the structured cable CAT6A patch panel. All cables are equipped with RJ45 connectors and labelling and assembly are included. The system has the following main cable types:

Cable type A:

Y-cable for feeding one data switch port and one analog intercom extension into a single CAT6A patch point.

Cable type C:

Y-cable for feeding relay output and one analog intercom extension into a single CAT6A patch point.

Cable type D:

Standard UTP patch cable.

1153200001

Data / Intercom Split Cable Type A - 15/2 Length: Data 15cm / Intercom 2m

1153200002

Data / Intercom Split Cable Type A - 15/3 Length: Data 15cm / Intercom 2

1153200003

Data / Intercom Split Cable Type A - 50/3 Length: Data 50cm / Intercom 3m

1153200004

Relay/ Intercom Split Cable Type C - 3/3 Length: Relay 3m / Intercom 3m

1153200006

Cable UTP Patch Cable Type D - Length 1 M 1153200008

Cable UTP Patch Cable Type D - Length 2 M 1153200010

Cable UTP Patch Cable Type D - Length 3 M

Cable UTP Patch Cable Type D - Length 5M





MANAGEMENT ALPHAPRO

AlphaPro is the tool for configuring the Vingtor-Stentofon ACM system. It is self contained, simple to install and easy to use. When a new server is to be configured, the server is given a working default factory setting.

The operator can then modify the settings such as:

- Directory (type of station, line interface, display name and more)
- Define groups (cell groups, guard groups)
- Interface to CCTV, PA, paging, DECT
- AlphaNet
- And other custom behavior

There are currently over 100 defined features which can be programmed with AlphaPro.AlphaPro is an off-line tool. This means that it is possible to enter all parameters without the necessity of being connected to the server. Once all parameters are entered, AlphaPro can be connected to the server and the parameters can be sent. AlphaPro can also upload configuration information from a server.

- AlphaPro connects to a server via the IP network or a local RS232 interface
- AlphaPro E7 runs without a hardware key. It gives access to all features except AlphaNet, but only for 36 subscribers

AlphaPro Professional uses the Professional hardware key. It gives access to all features for all stations. This version must be used when extensive changes to the autoload are required.

1009291120

AlphaPro professional, USB dongle

1009647902

Billing - 2 external trunks / 400 users

1009647904

Billing - 4 external trunks / 400 users

1009647908

Billing - 8 external trunks / 400 users

1009647916

Billing - 16 external trunks / 400 users

1009647932

Billing - 32 external trunks / 400 users

BILLING APPLICATION

The Billing application makes it possible to control the communication fees and expenses in a ACM system. The application is a full billing system which can generate revenues from the ACM system. It is possible to handle a set of billing scenarios. Fees can, for instance, be calculated depending on carrier type, duration, called number, and time of day. The billing of the users can be done by either prepaid or post-paid payment methods.

1009642001

SIP Trunking license, 1 line

1009642002

SIP Trunking license, 2 lines

1009642004

SIP Trunking license, 4 lines

1009642008

SIP Trunking license, 8 lines

1009642016

SIP Trunking license, 16 lines

1009642104

SIP Trunking license 4 lines, Upgrade from 2 lines

SIPTRUNKING LICENSE

SIP trunking gives the possibility to connect an ACM Excange to a telephone network, either directly to a SIP enabled telephone system or through a gateway to an analog or ISDN (BRI or PRI) system.



LICENSES

1009648500

BASIC AUDIO MESSAGING LICENSE

License requires AMC IP v11 hardware. Includes Delayed PA broadcast using recall to prevent feedback problems, 1 auto-attendant message, 2MB memory storage for audio messages. Limited to 3 custom prerecorded messages.

1009648501

ENHANCED AUDIO MESSAGING LICENSE

License requires AMC IP v11 hardware. Includes Delayed PA broadcast using recall to prevent feedback problems, 3 auto-attendant messages, 10MB memory storage for audio messages, Full ASVP functionality. Unlimited number of prerecorded messages within the specified storage space.

1009648502

PA RECALL LICENSE

License can be installed on both AMC IP v10 and v11 hardware. Includes Delayed PA broadcast using recall to prevent feedback problems

1009641006

IP Station License For 6 Stations - Supports 6 Intercom Stations

1009648001

CRM V LICENSE

Enables the use of IP DAK-48 modules on IP Flush Master Station

1009648011

Soft Client - License For 1 User

1009648012

Stentofon Soft Client - License For 6 Users

1009641601

IP-ARIO Audio License - 1 IP-ARIO

1009643006

SIP Station License For 6 SIP Telephones -Supports 6 Sip Or DECT Telephones

1009640202

Multi-Module Voip License - 2 Modules

1009640203

Multi-Module Voip License - 3 Modules 1009640204

Multi-Module Voip License - 4 Modules

VINGTOR - STENTOFON AUDIO MESSAGING

With Audio Messaging you can store and play audio messages directly from your PC or intercom station, and the messages are safely stored in the flash memory of the AlphaCom server. Audio Messaging supports a wide set of applications including auto-attendant, PA broadcasting, voice response and voice driven menus. You can make live PA and group call broadcasts with recall for handling feedback and verifying messages, as well as schedule PA and group broadcasts for specific events and set up an auto-attendant with voice guided menus for handling incoming calls. You can also set up a voice response for call request waiting messages and absence messages. The feature set of the license is compatible with that of the ASVP card, but offers some important functionalities in addition.

IP STATION & SIP STATION LICENSE

IP stations require a license. They do not require additional hardware such as an ASLT card. The maximum number of stations which is supported by an exchange is 552. These can all be IP stations if the network to which they are configured supports multicast. If this is not the case, the maximum number of supported IP stations in an exchange is 50.

Each telephone requires a SIP station license. SIP telephones can be physical units but also SIP softphone clients on a PC or PDA.

NETWORKING

AlphaNet and multi-module linking for the ACM exchanges can be via data networks. This does not require additional hardware inside the exchange, but opening up the capability requires the correct licence. Licenses are required in all connected modules and nodes. There is no difference whether a license is used for an AlphaNet or a multi-module connection. A static license means that the destination of an audio link needs to be defined at commissioning, a dynamic link is a common resource, and can be used for any audio link that requires connection. The data links between modules and nodes are not licensed.

The multi-module license gives the possibility of expanding the size of an exchange. It is possible to add up to 4 modules in a multi-module exchange. The modules will be linked together over a local area IP network (LAN). 30 VoIP channels are available in each exchange module. Note that the license is only required in the master module in the multimodule exchange.

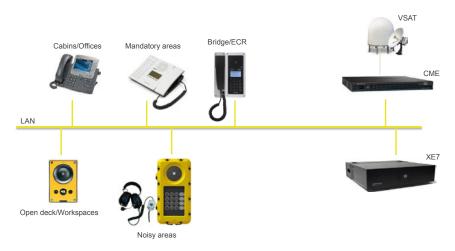


CISCO INTEGRATION

The ACM - Cisco Call Manager Integration expands the vessel's internal communication system to be an integrated communication system for your complete fleet and onshore offices.

The solution uses the ACM system to provide a type approved solution for the vessel and at the same time connects to a Cisco Call Manager Express server onboard the vessel. This allows you to use both Cisco telephones and type approved terminals. The ACM system is part of the private number plan used by the Cisco Call Manager system and connects to the Call Manager Express with VoIP protocols.

The integration allows you to take a best-of-breed approach, where you can mix ACM and Cisco telephones, intercoms, and DECT wireless in the same solution.



MANUALS & SPARES

A100K10647

ACM Family System Installation & Configura-

A100K10649

Data Network Guideline for ACM System

A100K10602

AlphaCom User Guide

A100K10430

ACM-M-A-V2 Telephone System

A100K10805

AlphaCom XE Installation, Configuration & Operation

A100K10390

SIP GSM Gateway MV-370

A100K10333

SIP Gateway Audiocodes MP-114/118

A100K10590

Billing Administration ACM

3006204084

ACMS1 Standard Set Of Spares

PROJECT DOCUMENTATION PROGRAMMING

9011206016

PROJECT DOCUMENTATION

- Zenitel standard documentation package
- Programming
- Installation drawings
- Documentation on CD

3006204012

ACM Programming





ANALOG TELEPHONES TRADITIONAL & ATEX

For use with Exchanges ACM-M-A.

Accessories in separate chapter.

2213000300

VAF-1 ANALOG FLUSH TELEPHONE W/RELAY

- Bridge and ECR console telephone
- Supports DTMF
- Double ringing tone selection for dual telephones in same area
- · Solid construction for marine environment
- Adjustable backlight
- Volume control
- Relay output



Size (WxHxD): 170 x 280 x 84 mm Weight: 0.6 kg

Additional Information: IP-22

2212000100

DT-800M - DESKTOP ANALOG TELEPHONE

- Solid construction for marine environment
- Desk or wall mounting
- Good audio quality
- Easy to use with large buttons and special function keys
- Suitable for cabins and offices

2213000100

HEAVY DUTY ANALOG TELEPHONE - MOUNTING PLATE INCLUDED

- 5 mm aluminium casing
- External ringer unit recommended such as HB-105 or CRB-7 with signal light
- Powered by phone line
- Full phone keypad plus special function keys

2213000200

HEAVY DUTY ANALOG TELEPHONE WITH DOOR MOUNTING PLATE INCLUDED

- 5 mm aluminium casing
- External ringer unit recommended such as HB-105 or CRB-7 with signal light
- Door has smart stay-open or stay-shut mechanism







Size (WxHxD): 162 x 110 x 195 mm Weight: 0.4 $\,\mathrm{kg}$

Additional Information: Plugbox PT-625A required IP-22

Size (WxHxD): 205 x 320 x 120 mm Weight: 5kg

Additional Information: IP-66 Optional Junction box JB-15T 0.no.3006090476

Size (WxHxD): 205 x 320 x 120 mm Weight: 5.4 kg

Additional Information: IP-67 Optional Junction box JB-15T O.no.3006090476



HSB-03 TELEPHONE WALL W/ HEADSET PLUG, ACTIVE, ON / OFF

- Weatherproof multipurpose telephone
- To be used in combination with headset P-MT7 or handset HAS-3
- Alarm bell HB-105 can be connected direct
- One relay (max 50 mA)
- Protection IP-66



Size (WxHxD): 124 x 724 x 63 mm Weight: 0.6 kg

Accessories

3005020050 P-MT7 Headset w/Boom Mic, 10M Cord 3005000022 HAS-3 Handset w/C16 Plug

TRADITIONAL INTERCOM **STATIONS**

For use with ACM Integrated system exchanges.

Accessories in separate chapter.



2213001003

DA24H TELEPHONE WITH HEADSET W/MF/LD KEYPAD DIAL, WT

- Analog industrial Ex Telephone w/ headset for Zone 1
- The telephone set has an extremely robust keypad with 16 push buttons
- Can use both DTMF and pulse dialling
- The handset has an adjustable locking hook
- Ex II 2G EEx m ib e (ib) IIC T6 -20 $^{\circ}$ C<= Ta <=40 °C. Ex II 2D EEx m ib e (ib) IIC T4 -20° C <=Ta <=60 °C



Size DA24H (WxHxD): 154 x 221 x 105 mm Weight: w/HS 2,23 kg

Additional Information: Protection IP-66

1007072090

VMP-D619B MAIN STATION LOW/ LOUDSPEAKING W/DISPLAY/VOL. **OVERRIDE AND D-10 KEYS, BLACK**

- Typed approved for broadcasting public address and general alarm as well as two way communication
- Combined wall and desk master station with full access to all features in the ACM exchange
- Easy operation provided by a 2 x 16 character alphanumeric display and ten direct access keys
- Superb audio quality
- Handset for confidential conversations
- Advanced supervision functions
- Volume override
- Approved station for PA/GA



Size (WxHxD): 225 x 75 x 176 mm Weight: 0.670 kg

Additional Information: Station accessory kit needed, see

2213001002

DA24 TELEPHONE W/MF/LD KEYPAD DIAL, WT

- Analog industrial Ex Telephone for Zone 1
- The telephone set has an extremely robust keypad with 16 push buttons
- Can use both DTMF and pulse dialling
- The handset has an adjustable locking hook
- Ex II 2G EEx m ib e (ib) IIC T6 -20 $^{\circ}$ C<= Ta <=40 $^{\circ}$ C. Ex II 2D EEx m ib e (ib) IIC T4 -20 $^{\circ}$ C <=Ta



Size (WxHxD): 154 x 221 x 105 mm Weight: 1.9 kg

Additional Information: Protection IP-66

1007034210

VMP-619 MAIN STATION LOW/ LOUDSPEAKING AND D-10 KEYS. **IVORY**

- Combined wall and desk master station with full access to all features in the ACM exchange
- 10 direct access keys
- Superb audio quality
- Handset for confidential conversations
- Advanced supervision functions



Size (WxHxD): 225 x 75 x 176 mm Weight: 0.670 kg

Additional Information: Station accessory kit needed, see



VMP-530 MAIN STATION WT

- Designed for humid, dirty and outdoor conditions, wall mounting
- Built-in microphone
- Need external loudspeaker VML-1520 (not included)
- Voice operated duplex, full duplex with handset VMP-211 or VMP-250



3006202035

included)

VMP-530VHM MAIN STATION W/

HANDMIC IN WT CABINET

conditions, wall mounting

Hand microphone included

Designed for humid, dirty and outdoor

Need external loudspeaker VML-1520 (not

Size (WxHxD): 310 x 215 x 160 mm Weight: 4.5 kg

Additional Information: IP-66

1008114010

TCAS-1 TURBINE COMPACT

- Analog MEMS microphone
- Unique 3D speaker grille design
- Dirt, dust and water resistant rating IP-66
- Built to last with robust die cast aluminium frame - rating IK 08
- Yellow thermoplastic front plate with one button plus M and C
- Ideal for Industrial applications

1020600315

VMP-503 MAIN STATION WITH **BUILT IN 50 OHM LOUDSPEAKER** WATERPROOF

- Designed for use with ACM exchanges and for wall mounting.
- Handsfree open conversation or private when used with Handset VMP-211 or VMP-250.
- Built-in loudspeaker
- Built-in electret microphone gives clear sound
- Keyboard with large digits
- C-key for cancelling calls
- M-key for manual switching of speech direction (simplex).
- Voice operating duplex speech.
- Full duplex when connected with handset VMP-221
- Public Address messages via General Call and Group
- Calls with automatic answer back, are available
- Audio Programmes can individually be selected and received.
- Screw terminals for easy connection of Installation cables and optional



Size (WxHxD): 124 x 224 x 63 mm Weight: 0.75 kg

Additional Information: IP-65

3006202031

Additional Information: IP-65

VMP-503PA PORTABLE MAIN STATION W/ BUILT-IN L/S WT

Size (WxHxD): 124 x 224 x 63 mm Weight: 0.750 kg

- Designed for humid, dirty and outdoor conditions
- 5 m cable, plug and carrying handle
- Built-in loudspeaker and microphone
- Voice operated duplex



Size (WxHxD): 124 x 224 x 63 mm Weight: 1.03 kg

Additional Information: IP-65 3006202037 VMP-503PA/15 portable main station w/ builtin loudsp.W/ 15m cable WT - IP-65



Size (WxHxD): 120 x 180 x 54 mm Weight: 0,8 kg

Accessories: 1008140010 TA-1 Turbine Compact On Wall Box IP-66



ACM IP STATIONS

IP INTERCOM STATIONS BRIDGE & **FCR**

Vingtor-Stentofon comprehensive range of IP intercom indoor solutions. IP intercom stations offer numerous advantages over their analog counterparts, such as minimal installation requirements, remote software upgrades and Power over Ethernet (PoE), among others.

1008097100

CRM-V-HS HANDSET FOR IP FLUSH **MASTER**

· Handset module for IP Flush Master



Size (WxHxD): 67 x 280 x 41 mm Weight: 0.4 kg

Additional Information: For 1008031000 IP Flush master

1008010100

CRM-V-DAK48 **DAK KEY EXPANSION MODULE** FOR CRM-V, 48 KEY

- Extends IP Flush Master Station with 48 programmable DAK keys (direct access kevs)
- Ideal for PA, talk-back and telephone calls
- Visual indications with two LEDs (green/red) per DAK key
- All keys have backlight (adjustable)
- Easy labelling of keys



Size (WxHxD): 125 x 280 x 30 mm Weight: 0.65 kg

Additional Information: For 1008031000 IP Flush master Require CRM license

1008031000

CRM-V IP FLUSH MASTER, DISPLAY

- Made for Critical Communication over IP
- · Connects directly to the IP network, no geographical limitations
- Large high contrast display with backlight for excellent readability
- White light behind all keys
- Four freely programmable single-touch keys
- Superb audio technology
- Optional handset unit
- Remote upgrade, configuration and monitoring
- Internal relay output



Size (WxHxD): 125 x 280 x 30 mm Weight: 0.37 kg

Additional information: 1008097500 Gooseneck Microphone. 1008097100 Handset Require IP station license

1008001000

IP DESK MASTER STATION W/ **DISPLAY & HANDSET**

- · Large high contrast display with backlight for excellent readability
- Four dynamic menu navigation keys
- Supports broadcast of general alarm and public address functions
- Supports wide set of features such as group call, conference call, call queuing
- Ten DAK keys provide single-touch access
- Handset for confidential conversations
- Superb audio quality through wide bandwidth codec and high quality, high output power amplifier
- Integrated Web server
- Remote software upgrade, configuration and
- Full duplex functionality gives optimal speech quality in loudspeaker mode



Size (WxHxD): 225 x 75 x 176 mm Weight: 0.630 kg

Additional Information: Require IP station license Wall bracket 1008091100

2213100000

CRM-VH HEADSET SOLUTION - IP FLUSH MASTER

- Headset solution for IP Flush Master
- Includes ON/OFF switch
- Flush mounting
- Light, comfortable, single-sided mono headset
- Noise cancelling microphone





Size (WxHxD): 96 x 96 x 80 mm Weight: 0.24 kg

Additional Information: IP-21 Disclaimer: Only for included headset



IP INTERCOM STATIONS FOR ROUGH ENVIRONMENTS

Vingtor-Stentofon offers a comprehensive range of IP intercom solutions for outdoor and Industrial use

IP intercom stations offer numerous advantages over their analog counterparts, such as minimal installation requirements, remote software upgrades and Power over Ethernet (PoE), among others.

1008041100

IP VANDAL RESISTANT SUBSTATION

- Connects directly to the IP network, no geographical limitation
- Dual Ethernet ports for connecting to other IP devices
- Possible connection to external IP video camera
- One relay output for door lock control or flash strobe light, etc.
- Remote software upgrade, configuration and monitoring
- Stainless steel front (A304)
- For indoor use, e.g. elevator.



Size (WxHxD): 92 x 180 x 46mm Weight: 0.8 kg

Accessories: 1008098100 Flush Mount Back Box 10008098000 On Wall Back Box

TFIE-1 TURBINE FULL-SIZE INDUSTRIAL IP EXTENDED-1

- IP intercom for industrial environments
- Dual Ethernet connectivity for redundant networks
- PoE powered

1008122010

- Auxiliary DC power for redundancy
- DIP functionality for use with AlphaCom servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dual relay outputs
- 6 configurable I/Os
- Dust- and water-protected to IP-66
- Accessories include Handheld PTT, Headset with ON/OFF and PTT and Handset with PTT
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- **Background Noise Cancellation**



Size (WxHxD): 178 x 345 x 101 mm Weight: 1.9 kg

Accessories: 1023533311 EMMAI-1H Mic, 1023533312 EMMAI-2H Mic, 1008140230 TA-23 Handset, AK5850HS Headset, 1008140225 TA-22B Cable & Plugbox, 1008140100 TA-10 Relay Module

1008111010

TCIS-1-TURBINE COMPACT IP STANDARD-1

- Amazing sound pressure level when needed
- Background noise cancellation
- Dirt, dust and water resistant Class IP 66
- Built to last with robust die-cast aluminum frame - Class IK 08
- Support wide set of IP and networking standards
- Yellow thermoplastic front plate with one button + M and C
- Buttons with background light



Size (WxHxD): 120 x 180 x 70 mm Weight: 0.8 kg

Additional Information: IP-66 1008140010 TA-1 Turbine Compact On Wall Box

1008122020

TFIE-2 TURBINE FULL-SIZE INDUSTRIAL IP EXTENDED-2

- IP intercom for industrial environments
- Dual Ethernet connectivity for redundant networks
- PoE powered
- Auxiliary DC power for redundancy
- DIP functionality for use with AlphaCom servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dual relay outputs
- 6 configurable I/Os
- Dust- and water-protected to IP-66
- Accessories include Handheld PTT, Headset with ON/OFF and PTT and Handset with PTT
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- **Background Noise Cancellation**



Size (WxHxD): 178 x 345 x 101 mm Weight: 1.9 kg

Accessories: 1023533311 EMMAI-1H Mic, 1023533312 EMMAI-2H Mic, 1008140230 TA-23 Handset, AK5850HS Headset, 1008140225 TA-22B Cable & Plugbox, 1008140100 TA-10 Relay Module



TCIS-6 TURBINE COMPACT IP

Amazing sound pressure level when needed

Dirt, dust and water resistant - Class IP 66

Built to last with robust die-cast aluminum

Black thermoplastic front plate with scrolling

unit for calling to an unlimited number of

Support wide set of IP and networking

Background noise cancellation

1008111060

SUBSTATION

frame - Class IK 08

standards

places

PMOLED display

Size (WxHxD): 120 x 180 x 70 mm Weight: 0.8 kg

Additional Information: IP-66 1008140010 TA-1 Turbine Compact On Wall Box



ACCESSORIES FOR INDUSTRIAL IP STATIONS

1008140100

TA-10 RELAY MODULE

- Designed for use with Turbine Industrial IP Intercom stations
- Powered by Turbine Industrial stations (TFIE-x)



Size (WxHxD): 100 x 50 x 40 mm Wt: 0.1 kg

Related items: 1008122010 TFIE-1, 1008122020 TFIE-2, 1008132010 TKIE-1

AK5850HS

A-KABEL TWINCOM HEADBAND **HEADSET ATEX**

- Rugged headset for Industrial application
- Noise-cancelling microphone
- High quality digital background noise reduction*
- HD-voice compatible*
- High quality audio
- Optional in-ear monitors may be connected for added damping in extreme environments
- Standard 4-pole Nexus connector for easy connection/replacement
- Designed for Turbine Industrial Intercoms



Weight: 0.4 kg

Additional Information: IP-66 1008140225 TA-22b 10m Cable and Plugbox with PTT for Industrial

1023533311

EMMAI-1H EXIGO HANDHELD INDUSTRIAL MICROPHONE, 1 BUTTON, IP66

- Handheld microphone for Industrial application
- PTT-kev on handset
- Noise-cancelling microphone
- High quality digital background noise reduction*
- HD-voice compatible*
- Designed for EXIGO industrial access-panels & Turbine industrial intercoms
 - * When used with Turbine Industrial intercom



Size (WxHxD): 71 x 99 x 39 mm Weight: 0.8 kg

Additional Information: IP-66

1008140225

TA-22B 10M CABLE AND PLUGBOX WITH PTT FOR **INDUSTRIAL HEADSET**

- 10-meter cable
- Compact, rugged plugbox with PTT for Industrial application
- Designed for Turbine Industrial Intercoms



Weight: 0.4 kg

Additional Information: IP-66 For 1008140220 TA-22 Industrial Headset for Turbine - pluggable

1023533312

EMMAI-2H HANDHELD INDUSTRIAL MICROPHONE, COMPACT

- Handheld microphone for Industrial stations
- Curled cord
- PTT key on handset
- Noise cancelling microphone
- High quality digital background noise reduction*
- HD voice compatible*
- Designed for EXIGO Ex access panels & Turbine Industrial intercom stations



Size (WxHxD): 44 x 68 x 21,5 mm Weight: 0.22 kg

Additional Information: IP-66 Wallbracket included

1008140230

TA-23 INDUSTRIAL HANDSET +

- Rugged handset for Industrial application
- PTT-key for simplex operation in extremely noisy environments
- Noise-cancelling microphone
- High quality digital background noise reduction*
- HD-voice compatible*
- Designed for Turbine Industrial Intercoms
- *when used with Turbine Industrial intercoms



Size (WxHxD): 50 x 200 x 70 mm Weight: 0.310 kg

Additional Information: IP-66



FCDC1 FLOWIRE ETHERNET CONVERTER, DC VOLTAGE

- One single pair of cable can be used to distribute power and data
- The cable hauls can be longer, reducing the need for switches and/or repeaters
- Up to 10 Flowire devices can be connected to the same 2-wire cluster, using star topology
- Existing infrastructure can be used, even though only a single pair is available. This reduces the total cost of retrofit projects
- The Flowire converter can be used with any Ethernet enabled device (not limited to VINGTOR products)
- Power 24 48 VDC
- Important note! Several clusters can not share same cable or junction boxes.
- Protection IP-20

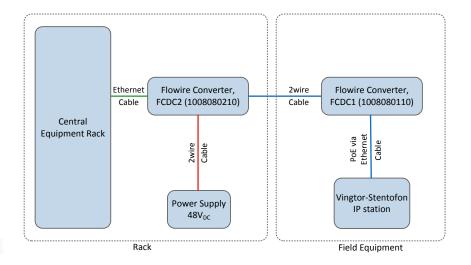


Size (WxHxD): 120 x 65 x 13 mm Weight: 0.3 kg

OPTIONAL CONNECTION TO CENTRAL FOR TURBINE AND OTHER IP STATIONS

The IP stations are connected to the central equipment rack using 2-wire cables. A Zenitel proprietary protocol, The Flowire in this case, is used to extend the Ethernet connection and support power distribution on the 2-wire cabling infrastructure.

To support the Flowire interface, the central equipment rack must be equipped with a Flowire Converter (FCDC2).



IP INTERCOM STATIONS AND ACCESSORIES FOR EX PROOF ENVIRONMENTS

Vingtor-Stentofon offers a comprehensive range of IP intercom solutions for Ex proof environment

IP intercom Ex stations offer numerous advantages over their analog counterparts, such as minimal installation requirements, and remote software upgrades

The IP Ex intercom stations use Zenitel Flowire technology

1008123010

TFIX-1 TURBINE FULL-SIZE EX INTERCOM STATION-1

- Ex IP intercom for potentially explosive atmospheres - Directive 94/9/EC
- Ethernet compatible 2-wire interface
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dust- and water-protected to IP-66
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Background Noise Cancellation



Size (WxHxD): 178 x 345 x 101 mm Weight: 4 kg

Accessories: 1023533511 EMMAX-1H Mic, 1008150030 TAX-3 Handset, AK5850HS Headset, 1008150025 TAX-2B Cable & Plugbox

1008123020

TFIX-2 TURBINE FULL-SIZE EX INTERCOM STATION-2

- Ex IP intercom for potentially explosive atmospheres - Directive 94/9/EC
- Ethernet compatible 2-wire interface
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dust- and water-protected to IP-66
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Background Noise Cancellation



Size (WxHxD): 178 x 345 x 101 mm Weight: 4 kg

Accessories: 1023533511 EMMAX-1H Mic, 1008150030 TAX-3 Handset, AK5850HS Headset, 1008150025 TAX-2B Cable & Plugbox



TFIX-3 TURBINE FULL-SIZE EX INTERCOM STATION-3

- Ex IP intercom for potentially explosive atmospheres - Directive 94/9/EC
- Ethernet compatible 2-wire interface
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dust- and water-protected to IP-66
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Background Noise Cancellation



Size (WxHxD): 178 x 345 x 101 mm Weight: 4 kg

Accessories: 1023533511 EMMAX-1H Mic, 1008150030 TAX-3 Handset, AK5850HS Headset, 1008150025 TAX-2B Cable & Plugbox

AK5850HS

A-KABEL TWINCOM HEADBAND HEADSET ATEX

- Rugged headset for Ex application
- Noise-cancelling microphone
- High quality digital background noise reduction
- HD-voice compatible
- High quality audio
- Optional in-ear monitors may be connected for added damping in extreme environments
- IP Rating: IP-66
- Standard 4-pole Nexus connector for easy connection/replacement
- For use with 1008150025 Ex-approved Cable for headset with PTT
- Designed for Turbine Ex explosion-proof intercoms



Weight: 0.4 kg

Additional Information: IP-66 1008150025 TAX-2b 10m Cable and Plugbox with PTT for AK5850HS

1008123040

TFIX-4 TURBINE FULL-SIZE EX INTERCOM STATION-4

- Ex IP intercom for potentially explosive atmospheres - Directive 94/9/EC
- · Ethernet compatible 2-wire interface
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dust- and water-protected to IP-66
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Background Noise Cancellation



Size (WxHxD): 178 x 345 x 101 mm Weight: 4 kg

Accessories: 1023533511 EMMAX-1H Mic, 1008150030 TAX-3 Handset, AK5850HS Headset, 1008150025 TAX-2B Cable & Plugbox

1008150025

TAX-2B CABLE AND PLUGBOX FOR AK5850HS HEADSET

- 10m cable
- Compact, rugged plugbox with PTT for Industrial application
- IP Rating: IP66
- For use with AK5850HS Headset
- For Turbine Ex intercoms



Lenght: 10 m

1023533511

EMMAX-1H HANDHELD MICROPHONE WITH PTT FOR EX APPLICATIONS

- Handheld microphone for Ex applications
- Curled cord
- PTT key on handset
- Noise cancelling microphone
- High quality digital background noise reduction*
- HD voice compatible*
- Designed for EXIGO Ex access panels & Turbine Ex explosion-proof intercom stations



Size (WxHxD): 44 x 68 x 21,5 mm Weight: 0.22 kg

Additional Information: IP-66 Wallbracket included

1008150030

TAX-3 EX-APPROVED HANDSET W/PTT, UNTERMINATED

- Rugged handset for EX application
- PTT-key for simplex operation in extremely noisy environments
- Noise-cancelling microphone
- High quality digital background noise reduction*
- HD-voice compatible*
- Designed for Exigo & Turbine EX explosionproof intercoms

*when used with Turbine Industrial Ex



Size (WxHxD): 50 x 200 x 70 mm Weight: 0.310 kg

Additional Information: IP-66 Wallbracket included



SIP TELEPHONES

A selection of SIP telephone and SIP conference telephones.

Each telephone require a SIP station license

See chapter ACM application software & licenses



2200012000

GRANDSTREAM GXP1450 - SIP TELEPHONE

- 180x60 pixel backlit graphical LCD display with up to 4 level grayscale
- 2 dual-color line keys (with 2 SIP accounts),
 3-way conference, and up to 2 call appearances
- 3 XML programmable context-sensitive soft keys, a desktop stand to allow 2-angle positions
- HD wideband audio, superb full-duplex handsfree speakerphone with advanced acoustic echo cancellation and excellent double-talk performance
- Large phonebook (up to 2,000 contacts) and call history (up to 2,000 records)
- Automated personal information service
- Dual switched auto-sensing 10/100Mbps network ports with integrated PoE



Size (WxHxD): 186 x 210 x 81 mm Weight: 0,8 kg

Additional Information: I

3007410050

IP 6000 SIP CONFERENCE TELEPHONE

- HD Voice –unparalleled clarity to make your conference calls more efficient and productive
- Clarity Technology —Deliver the best conference phone experience with no compromises
- 12-foot microphone pickup
- Industry-leading SIP software leveraging the most advanced SIP endpoint software in the industry, with advanced call handing, security, and provisioning features
- Robust inter operability –
 compatible with a broad array
 of SIP call platforms to maximize
 voice quality and feature
 availability while simplifying
 management and administration
- High-resolution display enables robust call information and multi-language support



Size (WxHxD): 368 x 311 x 64 mm Weight: 0,8 kg

Additional Information: I

3007410051

IP 7000 SIP CONFERENCE TELEPHONE - HD QUALITY

- HD Voice –unparalleled clarity to make your conference calls more efficient and productive
- Clarity Technology —Deliver the best conference phone experience with no compromises
- Flexible configuration options—
 multi-unit connectivity, expansion microphones
 and integration with Polycom HDX room
 telepresence solutions to meet the needs of
 many different types of rooms
- Strong, robust SIP software— leverages the most advanced SIP endpoint software in the industry, with advanced call handing, security, and provisioning features
- Robust interoperability— compatible with a broad array of SIP call platforms to maximize voice quality and feature availability while simplifying management and administration
- Large high-resolution display



Size (WxHxD): $394 \times 372 \times 73 \text{ mm}$ Weight: 1, 08 kg

Additional Information:



ACCESSORIES FOR STATIONS

SB01 SOCKETBOX WP FOR P-290

- For shore line connection
- · Box in fiber glass reinforced polyester



Size (WxHxD): 75 x 80 x 56 mm Weight: 0.4 kg

Additional Information: IP-65

DESK STATION ACCESSORY KIT

- Plugbox

1009800100

Wall bracket



1020600992

Additional Information: IP-66

3006090313

connection

inlet

IRR-3 RELAY BOX 24V DC OR 220V AC - SIGNAL UNIT

Size (WxHxD): 120 x 122 x 5 mm Weight: 0.4 kg

Separate relay unit for operation of 24 VDC or 220 AC visible and/or audible signal units.

64P3004 PLUG C16-1 4-PIN MALE

• For telephone connected to SB01= shore line

Plug in polyamid material with PG-13.5 cable

Wall mounting



Size (WxHxD): 110 x 80 x 63 mm Weight: 0.35 kg

Additional Information: IP-66

Size (WxHxD): 55 x 20 x 68 mm Weight: 0.05 kg

PT-625A-4-50 JACK SURFACE RJ11

Wall mounted socket for analog telephones

Additional Information: For DT-800M

3006102026

3005000034

CRB-7 RELAY BOX - 24VDC, 110/220VAC - SIGNAL UNIT, WT

- Unit designed for activation of extra signal device connected to telephone in noisy area
- Activated by ringing voltage



Size (WxHxD): 120 x 122 x 5 mm Weight: 0.4 kg

Additional Information: IP-66 For analog stations only

3005020050

P-MT7 HEADSET W/BOOM MIC, 10M CORD W/4-P PLUG (FOR HSB-03)

- Headset for Analog Telephone and Talk-Back systems
- To be used in noisy areas
- Includes headset holder



Weight: 1.2 kg

Additional Information: IP-54

Weight: 0.28 kg

Additional Information: Kit for VMP-D619B and VMP-619 1008001000 IP Desk station, use wall bracket only 1008091100

3006102047

HB-105 TELEPHONE TONE CALLER 60-100V AC, 105 DBA, WT

- Designed to replace the traditional mains bell
- Powered by telephone line
- A suitable additional ringer device for telephones in weather exposed and noisy areas



Size (WxHxD): 86 x 86 x 50 mm Weight: 0.2 kg

Additional Information: For all analog telephones

3005000022

HAS-3 HANDSET FOR HSB-03 W/ C16 PLUG

- · Handset with cradle and push button switch
- Designed for use together with HSB03



Size (WxHxD): 120 x 122 x 5 mm Weight: 0.4 kg

Additional Information: IP-44 WT version: 3005000023 HAS-3WT IP-66

1020600993

IRR-4 RELAY BOX FOR CLOSING CONTACT INPUT 24VDC & 115/230VAC

- Use a potential free contact to switch an external voltage supply to an external unit
- Support input: 24Vdc, 110-115Vac and 220-240Vac
- Support output: 24 Vdc max 6A, 110-115Vac or 220-240Vac max 2A



Size (WxHxD): 122 x 120 x 55 mm Weight: 0.4 kg

Additional Information: IP-66



VMP-36-PEL HEADSET WITH BOOM MIC. WITH 10 METER CABLE

- Portable headset
- Includes switchbox with ON/OFF and Talk push button w/ belt clip
- Standard with 10 meter cable
- To be used in noisy areas



3006202029

VMP-36-PELP PORTABLE HEADSET WITH BOOM MIC. AND 10 METER **CABLE AND PLUG**

- Portable headset for connection to CD-7 Plug
- Includes switchbox with ON/OFF and Talk push-button w/ belt clip
- Standard with 10 meter cable and plug 4 pin Amphenol
- To be used in noisy areas



CD-7-VMP PLUGBOX WT

- Designed to be used together with VMP-36-PELP, portable headset
- Has socket with dustcap
- Supports headset with ON/OFF button
- For on wall mounting



Size (WxHxD): 80 x 110 x 63 mm Weight: 0.4 kg

Additional Information: IP-66

3006090486

MT9 THROAT MICROPHONE FOR VMP-36-PEL/PELP

- Bone construction, vibration sensitive
- Impedance: 3900 Ohm @ 1kHz
- Cable: PUR, flame retardant, black ø3.0mm



Weight: 1.1 kg

Additional Information: IP-54

Weight: 1.1 kg

1020600700

Additional Information: IP-54

Weight: 0.04 kg

1020159000

CD-4 PLUG-BOX WT

- For portable unit VMP-503PA / VMP-503PA/15
- Wall mounting



Size (WxHxD): 80 x 110 x 63 mm Weight: 0.35 kg

Additional Information: IP-66

3006202024

VMP-211 WALL MOUNTED **HANDSET**

- For use on Industrial Master Stations
- The built-in loudspeaker is disconnected when lifting the handset
- Includes push to talk key in handset

HANDSET WT Weatherproof heavy duty industrial handset

- For use on Industrial Master Stations

VMP-250 WALL MOUNTED

- The built-in loudspeaker is disconnected when lifting the handset
- Includes push to talk key in handset





Size (WxHxD): 80 x 250 x 155 mm Weight: 0.9 kg

Additional Information: IP-44

Size (WxHxD): 98 x 242 x 153 mm Weight: 0.9 kg

Additional Information: IP-65



VMP-204 POWER AMPLIFIER 220VAC/12W IN 20 OHM

- Slave amplifier for VMP stations
- When extra loudspeakers is required in noisy
- Output, low impedance 8 20 ohm
- To be mounted close to the station.



Size (WxHxD): 120 x 220 x 91 mm Weight: 1.2 kg

Additional Information: IP-66

3005000029

MODEL-A TELEPHONE BOOTH DESK/ WALL ALUMINIUM WITH FULL SHELF

- Sound absorbent wall mounting / table top
- Full shelf (250 mm)
- Lightweight



Size (WxHxD): 584 x 622 x 495 mm Weight: 8.2 kg

3006100088

VML-1520 HORN LOUDSPEAKER 15W/20 OHM WT

- General purpose 15 Watt 20 ohm horn loudspeaker
- For use in deck areas, engine room etc.
- To be used together with ACM or talk-back



Size (WxHxD): 250 x 145 x 270 mm Weight: kg

Additional Information: IP-66 Optional junction box JB-15T, see chapter "Loudspeakers"

TA-1 TURBINE COMPACT ON WALL BOX

• For on-wall mounting of all Turbine Compact Stations



Size (WxHxD): 120 x 180 x 62mm Weight: 0.8kg

Related items: All Turbine Compact Stations

2340020010

DSP-15EEXMN W/ SST BRACKET EX SPEAKER 20 OHM 15W W/2X **GLANDS ATEX IP67**

- Material / Color Anti-static PA / Black
- Mounting Bracket
- · Effective freq. range 410 - 7000 Hz
- For Zone 1



Size (WxHxD): 106 x 144 x 207 mm Weight: 2.2 kg

Additional Information: IP-67 Atex approved 2340020057 DSP-15EExmN 80hm version

3006204179

RJ45 INDUSTRIAL 10G PLUG

- RJI 10G RJ45 plug Cat6, 8p IDC
- 1/10GBit Ethernet
- Male plug
- Cable diameter 4.5 9.0 mm



Size LxD): 57 x 16mm Weight: 0.009kg

Related items: For Turbine compact stations IP-20

MANUALS

A100K10602

AlphaCom XE User Guide for IP & Analog Stations

ACM User Guide for Analog Telephones

A100K11194

Turbine Stations Configuration Manual

A100K10866

DA24 Instruction For Use

A100K10878

HSB03 User & Technical Manual

A100K10843

GSM Analog Gateway



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