

SPA Public Address System

The SPA marine Public address and general alarm system is designed, tested and fulfill all requirement from Solas and class society the for this system. The system is very flexible, and allows configuration of either a small or more complex system.

The system has up to 4 zones, and operates as standard on 230 VAC and 24 VDC. The system is tested according to EN 60945, type approved by RMRS and CCS.

Optional:

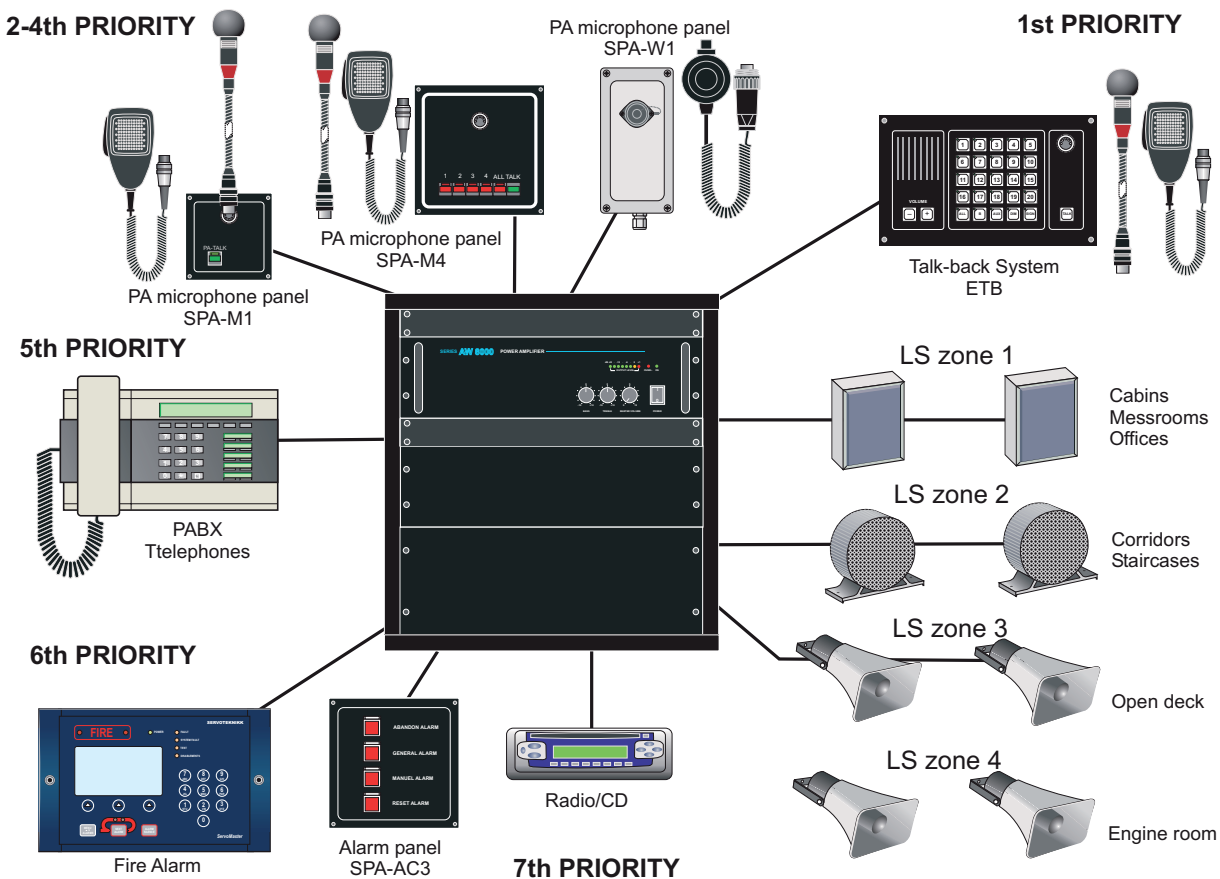
- Chime generator
- Rack expansion
- Alarm generator modules and -panels
- Monitor modules w/ speaker and volume
- Radio / CD player

Features

- 19" rack w/screw terminals for ship cable network
- Power Amplifiers, 100 V line with alternative power output of 120, 240 or 500 W
- Output level indication LEDs, overload protection and indication, master gain control and tone controls
- 4 zones selection + ALL
- Input for 3 microphone panels
- AUX / Alarm input
- Input from Talk-back system
- Input from PABX (preselected zones)
- Mains 230 V AC/24 V DC w/auto switch-over

Microphone panels with:

- Built-in pre-amplifiers
- Designed for connection of gooseneck or handheld microphones
- With zone selection (4 + ALL) or without (ALL only)
- For flush or bulkhead mounting



The system is tested according to EN60945, and are type approved by RMRS and CCS

SPA MAIN UNITS



SPA-120

PA MAIN UNIT, 19" RACK, 120 W

- * 3 mic. panel inputs (4 + all)
- * 1 input from talk-back system (ETB/CTB)
- * 1 input from PABX (pre-selected zone)
- * 4 zones relay output 100 V for speakers
- * Prepared for input from alarm generators EE1 or EE3
- * MUTE - one pot. free contact (NO/NC) for muting of external alarm device when PA message is given
- * 230 VAC/24 VDC w/AUTO switch-over.
- * *Steel cabinet, black*
- * *Dimension (mm): 12HU, 525W X 600H X 525D*



SPA-240

PA MAIN UNIT, 19" RACK, 240 W

- * 3 mic. panel inputs (4 + all)
- * 1 input from talk-back system (ETB/CTB)
- * 1 input from PABX (pre-selected zone)
- * 4 zones relay output 100 V for speakers
- * Prepared for input from alarm generators EE1 or EE3
- * MUTE - one pot. free contact (NO/NC) for muting of external alarm device when PA message is given
- * 230 VAC/24 VDC w/AUTO switch-over
- * *Steel cabinet, black*
- * *Dimension (mm): 12HU, 525W X 600H X 525D*



SPA-500

PA MAIN UNIT, 19" RACK, 500 W

- * 3 mic. panel inputs (4 + all)
- * 1 input from talk-back system (ETB/CTB)
- * 1 input from PABX (pre-selected zone)
- * 4 zones relay output 100 V for speakers
- * Prepared for input from alarm generators EE1 or EE3
- * MUTE - one pot. free contact (NO/NC) for muting of external alarm device when PA message is given
- * 230 VAC/24 VDC w/AUTO switch-over
- * *Steel cabinet, black*
- * *Dimension (mm): 12HU, 525W X 600H X 525D*

Note! All systems can be delivered for 110 VAC on request

ACCESSORIES TO SPA SYSTEMS

SPA additional power amplifier



P-8121

120 W AMPLIFIER, 230 VAC/24 VDC - 3HU - INCL. RACK EXP.

- * Booster unit designed for mounting in 19" rack system
- * Input by XLR sockets, a second output socket enables cascade connection of several units.
- * Output connection by using screw terminals.
- * Front panel control of treble and bass tones and of general volume, with ring-nuts for protecting against accidental activation.
- * LED-type VU-meter for clear and immediate reading of the power output. Signal lamp for abnormal operation (overload)
- * *Dimension (mm): 482W X 133H X 325D*
- * *Weight: 14,1 Kg*



P-8241

240 W AMPLIFIER, 230 VAC/24 VDC - 3HU - INCL. RACK EXP.

- * Booster unit designed for mounting in 19" rack system
- * Input by XLR sockets, a second output socket enables cascade connection of several units.
- * Output connection by using screw terminals.
- * Front panel control of treble and bass tones and of general volume, with ring-nuts for protecting against accidental activation.
- * LED-type VU-meter for clear and immediate reading of the power output. Signal lamp for abnormal operation (overload)
- * *Dimension (mm): 482W X 133H X 325D*
- * *Weight: 17,4 Kg*



P-8501

500 W AMPLIFIER, 230 VAC/24 VDC - 3HU - INCL. RACK EXP.

- * Booster unit designed for mounting in 19" rack system
- * Input by XLR sockets, a second output socket enables cascade connection of several units.
- * Output connection by using screw terminals.
- * Front panel control of treble and bass tones and of general volume, with ring-nuts for protecting against accidental activation.
- * LED-type VU-meter for clear and immediate reading of the power output. Signal lamp for abnormal operation (overload)
- * Equipped with two fans for forced ventilation of the final power stages.
- * *Dimension (mm): 482W X 133H X 420D*
- * *Weight: 25 Kg*

Note! Each amplifier requires 4HU in rack

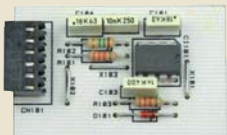
Additional equipment without "HU" consequences



SPA-MUL

MULTI ZONE CONTROL CARD

NOTE! always needed when more than one amplifier is required



SPA-CHIME

CHIME GENERATOR

SPA-MICPRIO

MICROPHONE PRIORITY BOARD WITH 3 PRIORITIES FOR MICROPHONE PANELS

Alarm features with "HU" consequences



SPA-EE1D

DUAL ALARM GEN. W/1 ALARM TONE, 1 MAIN AND 1 STANDBY

- * Jumpers can set to general or manual.
- * The module has inputs for SET, ENABLE and RESET the alarm and has relay-output
- * Alt.1. General Alarm: 7 short, 1 long tone 1 kHz
- * Alt.2 Manual alarm following input start signal



SPA-EE1

SINGLE ALARM GENERATOR WITH 1 ALARM TONE

- * Jumpers can set to general or manual.
- * The module has inputs for SET, ENABLE and RESET the alarm and has relay-output
- * Alt.1. General Alarm: 7 short, 1 long tone 1 kHz
- * Alt.2 Manual alarm following input start signal



SPA-EE3D

DUAL ALARM GENERATOR WITH 3 ALARM TONES, 1 MAIN AND 1 STANDBY

- * The module has a microprocessor which administrate the alarm tones and set-up the inputs and outputs
- * The module has three start inputs and three outputs for relay or lamps

Standard settings:

- | | |
|----------------------------------|-------------------------------|
| 1. Priority: general alarm: | 7 short and 1 long tone, 1kHz |
| 2. Priority: abandon ship alarm: | Wobbling tone approx. 1 kHz |
| 3. Priority: manual alarm: | Continuous tone, 1 kHz |

SPA-EE3

SINGLE ALARM GEN. WITH 3 ALARM TONES

- * The module has a microprocessor which administrate the alarm tones and set-up the inputs and outputs
- * The module has three start inputs and three outputs for relay or lamps

Standard settings:

- | | |
|----------------------------------|-------------------------------|
| 1. Priority: general alarm: | 7 short and 1 long tone, 1kHz |
| 2. Priority: abandon ship alarm: | Wobbling tone approx. 1 kHz |
| 3. Priority: manual alarm: | Continuous tone, 1 kHz |



SPA-AL-REL

WITHOUT "HU" CONSEQUENCES

3 x POT. FREE RELAY OUTPUT:

- * GA steady
- * GA pulsing
- * GA pulsing with mute
- * 230 VAC or 24 VDC, 6 A



SPA-REL

WITHOUT "HU" CONSEQUENCES

MULTIPURPOSE POTENTIAL FREE RELAY CONTACT,

- * 230 VAC or 24 VDC, 6 A



SPA-EMERGENCY

WITHOUT "HU" CONSEQUENCES

**VOLUME OVERRIDE WITH ALL-CALL AND ALARM,
0 dB AND POT. FREE CONTACT OUTPUTS**

For connection to telephone exchanges

SMIII-PA

PA TELEPHONE INTERFACE (TRUNK LINE NEEDED PER PA LINE)



SPA-PABX-ALL

0 dB WITH POT. FREE CONTACT, ACTIVATED BY "TALK", "PRESELECTED ZONES" AND "ALARMS", PABX INTERFACES (FROM PA TO PABX)

SPA-PABXR

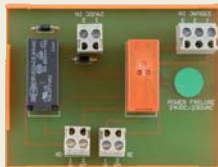
**PABX RECALL VOICE RECORDER, 3 HU MODULE
RACK EXP. INCL. PABX INTERFACES (PABX => PA)**

- * Recall voice recorder unit for PABX interface
- * Consist of 3x modules in 19" 3 U frame for SPA rack
- * The unit is a message/ voice recorder for up to 4 different messages

Monitoring

SPA-CON1

**AMPLIFIER LINE CONTROL MODULE.
ONE IN EACH AMPLIFIER, WITH LAMP INDICATION IN FRONT OF RACK
AND ONE POT. FREE OUTPUT SIGNAL FOR FAULT**



SPA-FAIL

POWER FAILURE OUTPUT RELAY WITH POTENTIAL FREE CONTACT

SPA-UPS

**AUTO SWITCH BETWEEN 230 VAC MAINS AND EMERGENCY POWER OR UPS
INCL. POWER FAIL**

SPA-VDR

**VDR INTERFACE 0 dB WITH POT. FREE CONTACT,
ACTIVATED BY "TALK" AND ALARM**

ENTERTAINMENT FEATURES

SPA-ENT4
ENTERTAINMENT INPUT WITH ZONE STRAPPING - 4 WIRE SYSTEM

Additional equipment with "HU" consequences

SPA-SWITCH
MONITOR WITH VOLUME LINE SELECTOR AND PROGRAM SWITCH 1-5 - 2HU



SPA-RCD
1 x RADIO (RDS) AND CD PLAYER (CAR TYPE) 2HU - RACK EXP. INCL.



- * 1x Radio / CD player mounted into a 19", 2 HU unit.
- * FM / MW / LW
- * RDS
- * CD player
- * Fixed pre-amp. output

SPA-RCD6
**1 x RADIO (RDS) AND CD PLAYER W/CD MAGAZINE (CAR TYPE)
3HU - RACK EXP. INCLUDED**

- * 1 x Radio / CD player mounted into a 19", 2 HU unit.
- * FM / MW / LW
- * RDS
- * CD player
- * Fixed pre-amp. output
- * Source selector
- * 6 disc CD magazine CD changer
- * Delivered with power supply 230 VAC / 12 VDC, 3 A

SPA-FM/AM
19" FM/AM TUNER - 1 HU - RACK EXP. INCLUDED

SPA-CAD6
19" CD PLAYER W/6 CD MAGAZINE - 2 HU - RACK EXP. INCL.

Expansion shelf

SPA-EXP
RACK EXPANSION IN STEP OF 4HU

SPA-SHELF
SHELF FOR ADDITIONAL EQUIPMENT, 4HU



DIN 24/30
24 VDC POWER SUPPLY, 3 AMP
NOTE! internal power supply for additional spa equipment when needed.

Message recorder



SPA-DMG9016
DIGITAL MESSAGE RECORDER/RECALL SYSTEM IN 19" 1 U, 230 VAC

- * Message generator 1 HU for 19" rack
- * For storing up to 16 different digital messages and a total length of 240 seconds overall
- * Two message groups, group A and group B, of 8 messages each
- * One microphone input with Phantom supply
- * One auxiliary input
- * Dynamic limited on microphone input
- * Two separate high-level outputs (group A & group B)
- * One high-level mixed outputs (group A + group B)
- * Internal monitoring loudspeaker with level adjustment
- * Facility for remote control from external push-button pad
- * Facility for excluding the internal push-button pad
- * Outputs for activating external equipment
- * Built-in two or three-tone warning signal generator
- * 230 VAC or 24 VDC power supply

SPA-DMG
REMOTE PANEL WITH 4 BUTTONS FOR REMOTE ACTIVATE OF 4 MESSAGES

SPADMGIU
MANUAL FOR DIGITAL MESSAGE RECORDER/RECALL

Dual system - two separate racks

SPA-DUAL
INTERFACE MODULE BETWEEN RACK A & B
NOTE! one in each rack when alarm generator EE1 or EE3 is installed.



SPA-JBAD-v2
JUNCTION BOX FOR SPA SYSTEM FOR SPLIT MICROPHONE AND ALARM SIGNALS TO RACK A & B
NOTE! one junction box for each PA/alarm panel type SPA-M4HAR, SPA-M4SAR, SPA-W1A or SPA-W1AR



SPA-JBA
JUNCTION BOX FOR SPA SYSTEM FOR SPLIT ALARM SIGNALS TO RACK A & B
** For alarm panel type SPA-ACR or SPA-AC3R.*



SPA-JBD-v2
JUNCTION BOX FOR SPA SYSTEM FOR SPLIT MICROPHONE SIGNALS TO RACK A & B
NOTE! one junction box for each PA/alarm panel type SPA-M1H, SPA-M1S, SPA-M4H, SPA-M4S or SPA-W1

SPAS
STANDARD SET OF SPARES

SPATU
TECHNICAL & USER MANUAL - SPA SYSTEM

Announcement and alarm units



SPA-M1H
PA PANEL FOR ALL CALL - FLUSH - WITH HANDHELD MICROPHONE ETC-1

- * Standard Microphone Panel
- * Built-in pre-amplifier
- * Including hand-held microphone ETC-1
- * One zone covering
- * For flush mounting
- * *Dimension (mm): 96W X 96H X 60D*
- * *Weight: 0,5 Kg*
- * *IP-44*



SPA-M1S
PA PANEL FOR ALL CALL - FLUSH - WITH GOOSENECK MICROPHONE MB-30G

- * Standard Microphone Panel
- * Built-in pre-amplifier
- * Including gooseneck microphone MB-30G
- * TALK button
- * One zone covering
- * *Dimension (mm): 96W X 96H X 60D*
- * *Weight: 0,3 Kg*
- * *IP-44*



SPA-BOXM1
WALL MOUNTING BOX FOR ABOVE PA-PANEL



SPA-M4H
PA PANEL WITH 4 ZONES AND ALL CALL - FLUSH WITH HANDHELD MICROPHONE ETC-1

- * Standard Microphone Panel
- * Built-in pre-amplifier
- * Including hand-held microphone ETC-1
- * 4 zones selection buttons
- * ALL button
- * For flush mounting.
- * *Dimension (mm): 144W X 144H X 60D*
- * *Weight: 0,6 Kg*
- * *IP-44*



SPA-M4S
**PA PANEL WITH 4 ZONES AND ALL CALL - FLUSH
 WITH GOOSENECK MIC MB-30G**

- * Standard Microphone Panel
- * Built-in pre-amplifier
- * Including gooseneck microphone MB-30G
- * 4 zones selection buttons
- * ALL button
- * TALK button
- * For flush mounting
- * *Dimension (mm): 144W X 144H X 60D*
- * *Weight: 0,5 Kg*



STBOKS5
**FOR STB-5/GN, SPA-M4S/H, SPA-AC3/R, AC3/R, VM15/50R
 WHEN WALL MOUNTED**

- * *Dimension (mm): 144W X 144H X 59D*
- * *Weight: 0,22 Kg*



SPA-M4HAR
**PA PANEL WITH 4 ZONES AND ALL CALL, THREE ALARM AND
 RESET BUTTONS WITH COVER - FLUSH - WITH HAND-HELD MICROPHONE ETC-1**

- * Microphone / alarm panel with hand-held microphone
- * Build-in pre-amplifier
- * Talk function
- * All an 4 line buttons
- * General, Manual / Fire, Abandon and Reset alarm buttons
- * Delivered for flush mounting
- * *Dimension (mm): 144W X 192H X 57D*
- * *Weight: 0,6 Kg*
- * *IP-44*



SPA-M4SAR
**PA PANEL WITH 4 ZONES AND ALL CALL, THREE ALARM AND RESET BUTTONS
 WITH COVER - FLUSH - WITH GOOSENECK MICROPHONE MB-30G**

- * Microphone / alarm panel with gooseneck microphone
- * Build-in preamplifier
- * Talk, All and 4 line buttons
- * General, Manual / Fire, Abandon and Reset alarm buttons
- * Delivered for flush mounting
- * *Dimension (mm): 144W X 192H X 57D*
- * *Weight: 0,5 Kg*
- * *IP-44*



SPA-BOXM4A
WALL MOUNTING BOX FOR ABOVE PA-PANEL



SPA-W1

PA PANEL FOR ALL CALL, WT

- * Weatherproof Microphone Panel
- * Built-in pre-amplifier
- * 4 pole socket for connection of handheld microphone P-66
- * For bulkhead mounting
- * *Dimension (mm): 80W X 160H X 55D*
- * *Weight: 0,5 Kg*
- * *IP-66*



SPA-W1A

PA PANEL FOR ALL CALL AND ONE ALARM BUTTON WITH COVER, WT

- * Weatherproof Microphone Panel
- * Built-in pre-amplifier
- * 4 pole socket for connection of handheld microphone P-66
- * All call and alarm button
- * For bulkhead mounting
- * *Dimension (mm): 80W X 160H X 55D*
- * *Weight: 0,5 Kg*
- * *IP-66*



SPA-W1AR

PA PANEL W/1 ZONE, ALL CALL 1 RESET AND ALARM BUTTON

- * Weatherproof Microphone Panel
- * Built-in pre-amplifier
- * 4 pole socket for connection of handheld microphone P-66
- * All call , alarm and reset button
- * For bulkhead mounting
- * *Dimension (mm): 80W X 160H X 55D*
- * *Weight: 0,5 Kg*
- * *IP-66*

Note! SPA-W1, W1A and W1AR need P-66 or P-66/10 WT cabinet recommended for outdoor installation.



P-66

HANDMIC. WITH PLUG FOR ABOVE , WT

- * Watertight, salt water resistant hand-held microphone-loudspeaker unit.
- * Suitable for heavy-duty outdoor operation subject to noise disturbance.
- * Delivered with 2 meter flexible cable and plug.
- * For use in Public Address and Talk-Back systems.
- * *Weight: 0,3 Kg*
- * *IP-66*



P-66/10

HAND MICROPHONE WITH PLUG AND 10 M CABLE

- * Watertight, salt water resistant hand-held microphone / loudspeaker unit.
- * Suitable for heavy-duty outdoor operation subject to noise disturbance.
- * Delivered with 10 m cord and plug.
- * For use in: Public Address and Talk-Back systems.
- * *Weight: 0,4 Kg*
- * *IP-66*



ECM-5

EXTENSION CORD 5 M FOR P-290, P-MT7, P-66

- * Male and female plug in polyamid material with PG-13,5 cable inlet.
- * *Weight: 0,3 Kg*
- * *IP-66*



ECM-10

EXTENSION CORD 10 M FOR P-290, P-MT7, P-66

- * Male and female plug in polyamid material with PG-13,5 cable inlet.
- * *Weight: 0,5 kg*
- * *IP-66*



SPA-AC3

ALARM PANEL WITH 3 COVERED AND ILLUMINATED ALARM START BUTTONS LIGHT DIMMER, FLUSH MOUNTING

- * Alarm panel for indoor use.
- * Abandon, General and manual alarms.
- * *Dimension (mm): 144W X 144H X 60D*
- * *Weight: 0,4 Kg*
- * *IP-44*



SPA-AC3R

ALARM PANEL WITH 3 COVERED AND ILLUMINATED ALARM START AND RESET BUTTONS, LIGHT DIMMER, FLUSH MOUNTING

- * Alarm panel for indoor use.
- * Abandon, General and manual alarms.
- * Reset alarm
- * *Dimension (mm): 144W X 144H X 60D*
- * *Weight: 0,4 Kg*
- * *IP-44*



STBOKS5

FOR STB-5/GN, SPA-M4S/H, SPA-AC3/R, AC3/R, VM15/50R WHEN WALL MOUNTED

- * *Dimension (mm): 144W X 144H X 59D*
- * *Weight: 0,22 Kg*

UPS units



UPS-200

ONLINE UPS NP-1000 GIVES 200 W IN 30 MIN'S

- * Input: 187 - 264 VAC
- * Output: 230 VAC 50/60 Hz
- * *Dimension (mm): 185W X 225H X 430D*
- * *Weight: 15 kg*



UPS-600

ONLINE UPS NP-1000 / NPB3614 WITH EXTRA BATTERY CABINET GIVES 600 W IN 30 MIN'S

- * Input: 187 - 264 VAC
- * Output: 230 VAC 50/60Hz
- Cabinet 1:*
 - * *Dimension (mm): 185W X 225H X 430D*
 - * *Weight: 15 kg*
- Cabinet 2:*
 - * *Dimension (mm): 185W X 225H X 430D*
 - * *Weight: 21 kg*



UPS-1000

ONLINE UPS NP-2000L GIVES 1000 W IN 30 MIN'S

- * Input: 187 - 264 VAC
- * Output: 230 VAC 50/60Hz
- * *Dimension (mm): 293W X 220H X 557D*
- * *Weight: 38 kg*



UPS-1500

ONLINE UPS NP-3000 / NP10807 WITH EXTRA BATTERY CABINET GIVES 1500 W IN 30 MIN'S

- * Input: 187 - 264 VAC
- * Output: 230 VAC 50/60Hz
- Cabinet 1:*
 - * *Dimension (mm): 293W X 220H X 557D*
 - * *Weight: 38 kg*
- Cabinet 2:*
 - * *Dimension (mm): 293W X 220H X 557D*
 - * *Weight: 29 kg*



UPS-3500

ONLINE UPS LP0511 / BATL1 WITH EXTRA BATTERY CABINET GIVES 3500 W IN 30 MIN'S

- * Input: 187 - 264 VAC
- * Output: 230 VAC 50/60Hz
- Cabinet 1:*
 - * *Dimension (mm): 537W X 310H X 580D*
 - * *Weight: 110 kg*
- Cabinet 2:*
 - * *Dimension (mm): 537W X 310H X 580D*
 - * *Weight: 73 kg*

Note! Other UPS on request

STANDARD LOUDSPEAKERS**Loudspeaker 20 ohm**

VML-1520

HORN SPEAKER 15 W, 20 OHM, WT

- * General purpose 15 W horn loudspeaker for use on deck areas, eng. room etc.
- * To be used together with ACM or talk-back stations
- * With 2.8 m cable
- * *Dimension (mm): 250W X 145H X 270D*
- * *Weight: 1,35 Kg*
- * *IP-66*



CAU-4

LOUDSPEAKER 4 W, 20 OHM , MOUNTING BRACKET

- * Weatherproof wall loudspeaker w/ transformer for use galleys etc.
- * Excellent for P.A. intercom
- * *Dimension (mm): 128W X 237H X 100D*
- * *Weight: 1,9 Kg*
- * *IP-55*



DSP-15EEexN

EX SPEAKER 15 W WITH TWO CABLE INLETS ATEX APPROVED, WT

- * *Dimension (mm): 106W X 144H X 207D*
- * *Weight: 2,2 Kg*
- * *IP-67*

With transformers for 100 V line

SAFE-10PTF

LOUDSPEAKER WITH TWO CABLE INLETS AND FUSE, WALL 10 W

- * *Dimension (mm): 206W X 104H X 55D*
- * *Weight: 0,8 Kg*
- * *IP-44*



HP-15TF

HORN SPEAKER 15 W WITH FUSE, WT

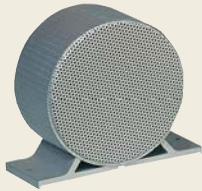
- * *Dimension (mm): 200Ø X 247D*
- * *Weight: 1,7 Kg*
- * *IP-56*



BF-560T

LOUDSPEAKER, FLUSH MOUNTED, 6 W

- * Ceiling loudspeaker for accommodation use.
- * *Dimension (mm): 165Ø X 150D*
- * *Weight: 1,0Kg*



CAR-4T

LOUDSPEAKER, WALL MOUNTED, 4 W

- * Double faced loudspeaker for accommodation and corridors use.
- * *Dimension (mm): 152Ø X 90D*
- * *Weight: 1,5 Kg*



CAU-4T

LOUDSPEAKER 4 W, WT

- * Weatherproof wall loudspeaker w/ transformer for use galleys etc.
- * *Dimension (mm): 128W X 237H X 100D*
- * *Weight: 1,9 Kg*
- * *IP-55*



CW-4T

LOUDSPEAKER 4 W, WALL MOUNTED, NUT TREE FINISH

- * Wall loudspeaker for accommodation use.
- * *Dimension (mm): 250W X 170H X 88D*
- * *Weight: 1,2 Kg*



CW-4T/VO

LOUDSPEAKER 4 W, VOLUME CONTROL AND 4 WIRE OVERRIDE, WALL MOUNTED, NUT TREE FINISH

- * Wall loudspeaker w/ volume for accommodation use.
- * *Dimension (mm): 250W X 170H X 88D*
- * *Weight: 1,2 Kg*



CP-66T

BIDIRECTIONAL WALL MOUNTED SPEAKER

- * *Dimension (mm): 270W X 150H X 70D*
- * *Weight: 0,9 Kg*

VML-15T

HORN SPEAKER 15 W, WT

- * General purpose 15 W horn loudspeaker w/transformer for use on deck areas, eng. room etc.
- * To be used together with 100 V line amplifier
- * With 2.8 m cable.
- * *Dimension (mm): 250W X 145H X 298D*
- * *Weight: 1,35 Kg*
- * *IP-66*



JB-15T

JUNCTION BOX FOR VML-15T

- * *Dimension (mm): 97W X 90H X 58D*
- * *Weight: 0,12 Kg*
- * *IP-66*



HP-30T

HORN SPEAKER 30 W, WT

- * *Dimension (mm): 237Ø X 286D*
- * *Weight: 2,3 Kg*
- * *IP-67*



DST-100

DRIVER 100 W FOR DH-30/50 WT

- * *Dimension (mm): 128Ø X 176D*
- * *Weight: 2,5 Kg*
- * *IP-67*



DH-30

HORN FOR DST-100, WT

- * *Dimension (mm): 325Ø X 345D*
- * *Weight: 3,6 Kg*
- * *IP-67*



DH-50

HORN FOR DST-100, WT

- * *Dimension (mm): 508Ø X 505D*
- * *Weight: 5,15 Kg*
- * *IP-67*



Special loudspeakers, tropicalized, with steel dome and transformer for 100 V line, 2 X M20 glands and fuse



BF-560STT

LOUDSPEAKER 6 W, FLUSH MOUNTED

- * Ceiling loudspeaker for accommodation use.
- * *Dimension (mm): 165Ø X 107D*
- * *Weight: 1,2 Kg*

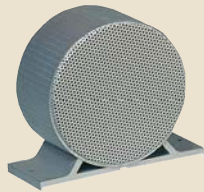


VES-360TF

LOUDSPEAKER 6 W, FLUSH MOUNTED

- * Ceiling loudspeaker for accommodation use.
- * *Dimension (mm): 129,5Ø X 85D*
- * *Weight: 0,6 Kg*

Special loudspeakers with transformer for 100 V line and fuse



CAR-4TF

LOUDSPEAKER 4 W WITH FUSE, WALL MOUNTED

- * Double faced loudspeaker for accommodation and corridors use.
- * *Dimension (mm): 152Ø X 90D*
- * *Weight: 1,5 Kg*



CW-4T/VOF

LOUDSPEAKER 4 W WITH VOLUME CONTROL AND FUSE, BRACKET FOR WALL MOUNTING, WHITE FINISH

- * Wall loudspeaker with volume control for accommodation use.
- * *Dimension (mm): 250W X 170H X 88D*
- * *Weight: 1,2 Kg*

ATEX approved loudspeaker 100 V line



CAREEX-6T
LOUDSPEAKER 6 W, ATEX APPROVED

- * Double faced loudspeaker for accommodation and corridors use.
- * *Dimension (mm): 170Ø X 145D*
- * *Weight: 4,0 Kg*
- * *IP-53*



DSP-15EExeNT
EX SPEAKER 15 W WITH TWO CABLE INLETS, ATEX APPROVED, WT

- * *Dimension (mm): 106W X 144H X 207D*
- * *Weight: 2,2 Kg*
- * *IP-67*

Volume controls



VM15-R
VOLUME CONTROL, 4 WIRE OVERRIDE, FLUSH MOUNT, 15 W

- * Volume control - 4 wire override for flush mounting
- * Suitable in Public Address System with 24 V override
- * *Dimension (mm): 96W X 96H X 80D*
- * *Weight: 0,4 Kg*
- * *IP-44*



VM50-R
VOLUME CONTROL, 4 WIRE OVERRIDE, FLUSH MOUNT, 50 W

- * Volume control - 4 wire override for flush mounting
- * Suitable in Public Address System with 24 V override
- * *Dimension (mm): 96W X 96H X 80D*
- * *Weight: 0,4 Kg*
- * *IP-44*



SPA-BOXM1
WALL MOUNTING BOX FOR VOLUME CONTROLS



VM15-RD

DUAL VOLUME CONTROL, 4 WIRE OVERRIDE, FLUSH MOUNT, 2 x 15 W

* *Dimension (mm): 144W X 144H X 57D*

* *Weight: 0,7 Kg*

* *IP-44*



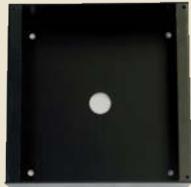
VM50-RD

DUAL VOLUME CONTROL, 4 WIRE OVERRIDE, FLUSH MOUNT 2 x 50 W

* *Dimension (mm): 144W X 144H X 57D*

* *Weight: 0,7 Kg*

* *IP-44*



STBOKS5

FOR VM15/50R WHEN WALL MOUNTED

* *Dimension (mm): 144W X 144H X 59D*

* *Weight: 0,22 Kg*

Note! All volume controls are delivered for flush mounting, if not specified.

SIGNAL UNITS

Rotary lights



- EHS-24**
ROTARY LIGHT 24 VDC yellow - blue - green - red
- * Rotary light for all systems.
 - * Equipped with 1m cable
 - * To be mounted in noisy areas etc
 - * *Dimension (mm): 147Ø X 220H*
 - * *Weight: 0,9 Kg*
 - * *IP-54*



- EHS-220**
ROTARY LIGHT 220 VAC yellow - blue - green - red
- * Rotary light for all systems.
 - * Equipped with 1m cable
 - * To be mounted in noisy areas etc
 - * *Dimension (mm): 147Ø X 220H*
 - * *Weight: 1,0 Kg*
 - * *IP-54*

Sounders



- A-100**
ELECTRONIC ALARM HORN 24 VDC, 100 dB, WT
- * Audible signal device for all systems.
 - * Signal device do have the possibility for many different tones.
 - * To be wall-mounted in noisy areas like engine room etc.
 - * *Dimension (mm): 114W X 87H X 87D*
 - * *Weight: 0,26 Kg*
 - * *IP-55*



- A-100AC**
ELECTRONIC ALARM HORN 220 VAC, 100 dB, WT
- * Audible signal device for all systems.
 - * Signal device do have the possibility for many different tones.
 - * To be wall-mounted in noisy areas like engine room etc.
 - * *Dimension (mm): 114W X 87H X 87D*
 - * *Weight: 0,26 Kg*
 - * *IP-55*

Bells



- EXB-8220**
BELL 8" 220 VAC INCL. BACK BOX WB4
- * Signal bell for all systems
 - * To be wall mounted in corridors etc
 - * *Dimension (mm): 200Ø X 121D*
 - * *Weight: 1,5 Kg*
 - * *IP-54*

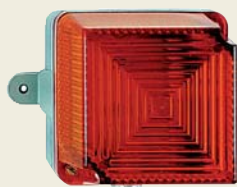
Flashing beacons



BLK5-24

FLASH BEACON, ORANGE, 15-35 VDC, 5 JOULE, WT

- * Optical signalling device of rugged design for indoor and outdoor use with compensation valve to prevent condensation
- * *Dimension (mm): 107W X 107H X 104D*
- * *Weight: 0,7 Kg*
- * *IP-65*



BLK5-230

FLASH BEACON, ORANGE, 230 VAC, 5 JOULE, WT

- * Optical signalling device of rugged design for indoor and outdoor use with compensation valve to prevent condensation
- * *Dimension (mm): 107W X 107H X 104D*
- * *Weight: 0,7 Kg*
- * *IP-65*

Combined audio / visual



SON-16

COMBINED AUDIBLE/VISUAL DEVICE, 100 dB, 24 VDC, WT

- * Well suited for fire and security purposes incorporating high sound output, low current consumption, high quality and simple installation.
- * *Dimension (mm): 98W X 176H X 83D*
- * *Weight: 0,51 Kg*
- * *IP-55*

Explosion proof beacons



BEX-24

EX APPROVED LIGHT 24 VDC INCL. CABLE GLAND, Ex II 2 G - EEx d IIC T5, WT

- * Hazardous area xenon warning beacon
- * *Dimension (mm): 153W X 154H X 246D*
- * *Weight: 2,45 Kg*
- * *IP-66*



BEXS-220AC

EX APPROVED LIGHT 220 VAC, INCL. CABLE GLAND, Ex II 2 G - EEx d IIC T5 WT

- DOME COLOR: ORANGE / RED / YELLOW / GREEN / BLUE / TRANSPARENT**
- * Hazardous area xenon warning beacon
- * *Dimension (mm): 153W X 154H X 246D*
- * *Weight: 2,75 Kg*
- * *IP-66*

Explosion proof bells / horn



DHW2-24

EX SIGNAL BELL 24 VDC, WT -II 2 G EEx de IIC T6

- * Loud signal bell with typical bell tone for warning, calling and indicating, approx. 105 dB (A)
- * *Dimension (mm): 200Ø X 270D*
- * *Weight: 6,0 Kg*
- * *IP-66*



DHW1

EX SIGNAL BELL 230 VAC, WT -II 2 G EEx de IIC T6

- * Loud signal bell with typical bell tone for warning, calling, indicating – approx. 105 dB (A)
- * *Dimension (mm): 200Ø X 270D*
- * *Weight: 6,0 Kg*
- * *IP-66*



DHH1-230

EX SIGNAL HORN 230 VAC 50/60 Hz, WT -II 2 G EEx de IIC T6

- * Loud signal horn with typical horn tone for warning, calling and indicating, approx. 105 dB (A)
- * *Dimension (mm): 190Ø X 265D*
- * *Weight: 5,5 Kg*
- * *IP-66*