MED-100/200 Hybrid and Full IP Telephone System

GENERAL DESCRIPTION

The Auto Telephone System is an electronic telephone switchboard with reliability and durability to meet various needs occurring inside or outside the ship. It operates as with the interface between the central exchange unit, which is a micro-computer controlled system, and telecommunication equipment. Particularly, the system is suited to connecting not only to the telecommunication equipment such as Inmarsat-F, VSAT, Mini-M, and VSM but also to the Internet protocols and network communications. This system contains a minimum of 24 extension lines up to 500 and the lines can be installed by 8 or 16 units. As for the type of telephone, flush, wall, portable, waterproof, explosion-proof, and intrinsically safe (Used for normal condition or in the area with the possibility of explosive gas in case of accident) types are available, which can be interfaced to Horn/Bell/Flashing Light. This system was tested at the IEC60945 standard. The Type Approval was done by DNV GL, RMRS.

PRODUCT INFORMATION

SYSTEM FEATURES
- Extension 40 + Trunk 4 ~ Extension 128 + Trunk 4
- Simultaneous Call : 30 Lines
- Paging call : 3 Lines, 10 Groups to PA system
- Priority call / Group call / Call pickup function / Wake-up call
- Call transfer / Call forwarding / Camp-on / Hotline
- Add-on conference : 5 Parties, 6 Groups
- Self-ring testing / System fail alarm & display
- Handset hook fail alarm / Handset hook fail display
- Main / emergency power automatic change & alarm display
- Method for programming at front of main PABX cabinet
- ISDN Connection using gateway (Optional)
- VoIP using gateway (Optional)
- Call accounting by serial printer (Optional)
- EPROM back-up memory (Optional)
- Recording and playback for PA/GA paging (Optional)
- Time synchronization between master clock or GPS system
- Interface among VSAT and LAN/WAN network using IP gateway(Optional)
- Program password protection / Variety application

ELECTRIC & ENVIRONMENT
- Power Source : AC110/220V, 1θ, 50/60 Hz
- Emergency Power : AC or DC 24V (Ripple less than 5%)
- Power Consumption : AC - less than 100VAC
                                      DC - less than 5A (At 24V DC)
- Temperature : -20°C ~ +45°C
- Humidity : Less than 90%
- Certification : Submitted

INTEGRATED COMMUNICATION SYSTEM
- PABX system : Analog, IP, Wi-Fi Phone using gateway
- PA/GA system : Single or duplicated applications
- Communal aerial system : IP-TV, CCTV, TVRO, DVD, etc.
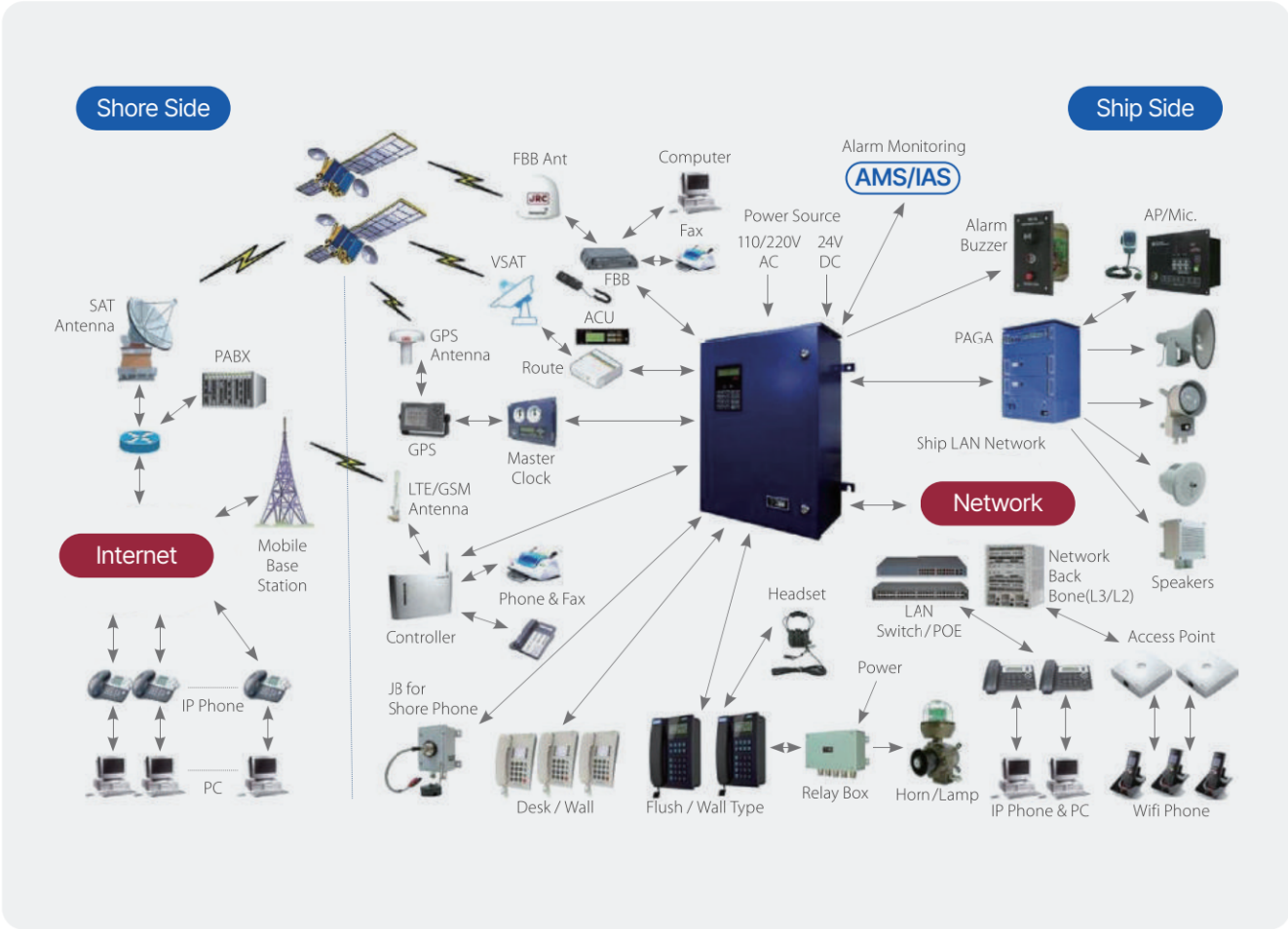- Master clock system : Slave clock interfaced with GPS

MED-100 Main Cabinet

MRC

Integrated Communication System	1. PABX system : Analog, IP, Wi-Fi Phone using gateway 2. PA/GA system : Single or duplicated applications 3. Communal aerial system : IP-TV, CCTV, TVRO, DVD & etc 4. Master clock system : Slave clock interfaced with GPS

Integrated Communication System Network Diagram

MCX-5000 Auto-Exchanger System

GENERAL DESCRIPTION

The Auto Telephone System is an electronic telephone switchboard with reliability and durability to meet various needs occurring inside or outside the ship. It operates with the interface between the central exchange unit, which is a micro-computer controlled system, and telecommunication equipment. Particularly, the system is suited to connecting not only to the telecommunication equipment such as Inmarsat-F, VSAT, Mini-M, and VSM but also to the Internet protocols and network communications. This system contains a minimum of 24 extension lines up to 500 and the lines can be installed by 8 or 16 units. As for the type of telephone, flush, wall, portable, waterproof, explosion-proof, and intrinsically safe (Used for normal condition or in the area with the possibility of explosive gas in case of accident) types are available, which can be interfaced to Horn/Bell/Flashing Light. This system was tested at the IEC60945 standard. The Type Approval was done from DNV GL.

PRODUCT INFORMATION

SYSTEM FEATURES

- Extension 40 + Trunk 4 ~ Extension 128 + Trunk 4
- Simultaneous Call : 30 Lines
- Paging call : 3 Lines, 10 Groups to PA system
- Priority call
- Group call
- Call pickup function
- Wake-up call
- Call transfer
- Call forwarding
- Camp-on
- Hotline
- Add-on conference : 5 Parties, 6 Groups
- Self-ring testing
- System fail alarm & display
- Handset hook fail alarm
- Handset hook fail display
- Main / emergency power automatic change & alarm display
- Method for programming at front of main PABX cabinet
- ISDN Connection using gateway (Optional)
- VoIP using gateway (Optional)
- Call accounting by serial printer (Optional)
- EPROM back-up memory (Optional)
- Recording and playback for PA/GA paging (Optional)
- Time synchronization between master clock or GPS system
- Interface among VSAT and LAN/WAN network using IP gateway (Optional)
- Program password protection
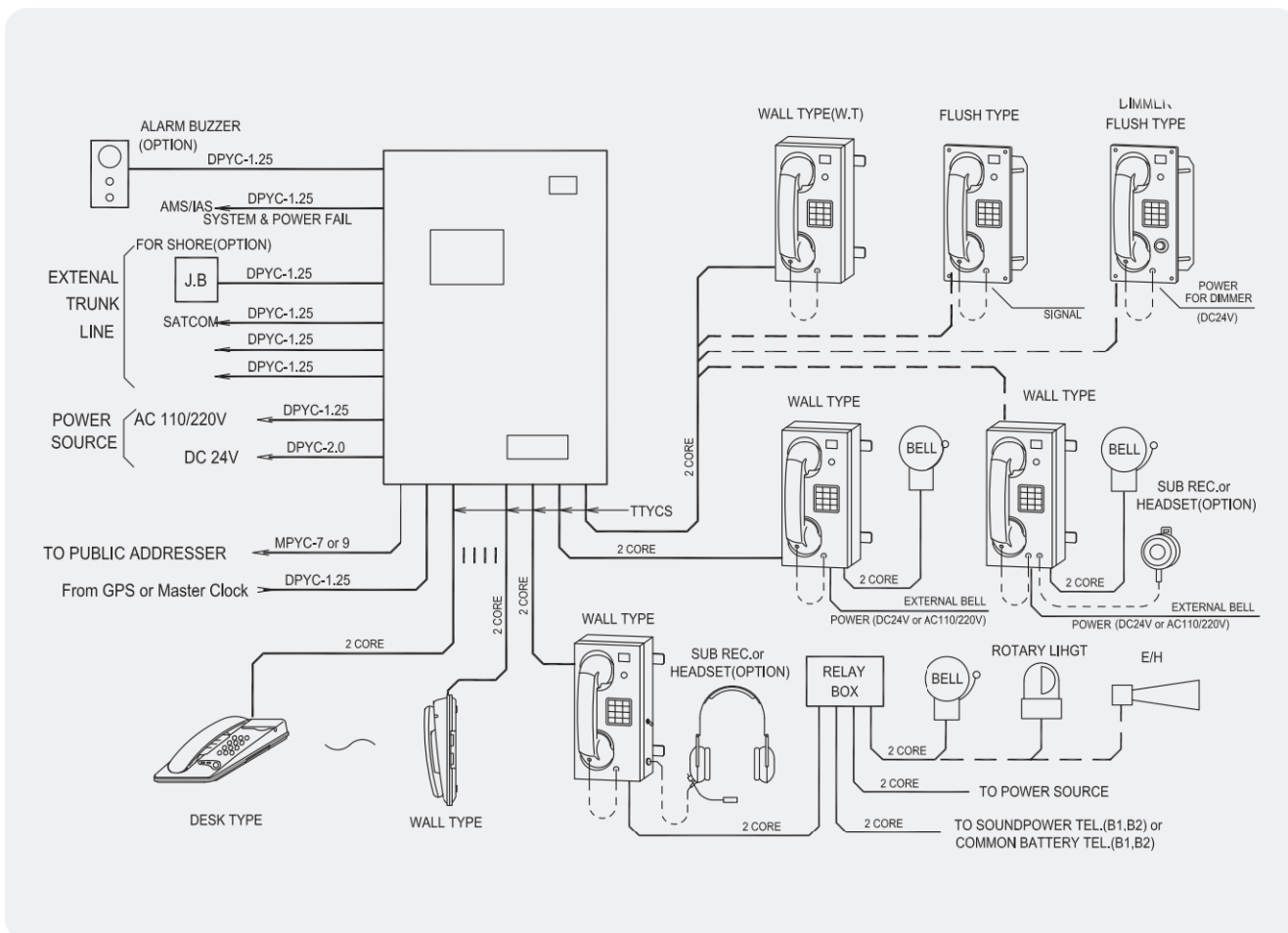- Variety application

MCX-5000 Main Cabinet

Electric & Environment

1. Power Source : AC110/220V, 1θ, 50/60 Hz
2. Emergency Power :
   AC or DC 24V (Ripple less than 5%)
3. Power Consumption :
   AC - less than 100VA
   DC - less than 5A (At 24V DC)
4. Temperature : -20℃ ~ +45℃
5. Humidity : Less than 90%
6. Certification : Submitted

Electric & Environment

1. PABX system : Analog, IP,
   Wi-Fi Phone using gateway
2. PA/GA system : Single or
   duplicated applications
3. Communal aerial system :
   IP-TV, CCTV, TVRO, DVD & etc
4. Master clock system :
   Slave clock interfaced with GPS

Wiring Diagram of Auto Exchanger System

Accessories: **Auto Telephone**

ACCESSORY TELEPHONE

MODEL	LC-221A	LC-221B	LC-213A	LC-213B
PHOTO				
Mounting Type	DESK	WALL	WALL	WALL
Gland	X	X	X	1
Signal Contact	X	X	O	O
Terminal Device	X	O	O	O
Headset	X	X	X	X
Dimmer	X	X	X	X
IP Grade	IP22	IP22	IP22	IP44
(WxDxH)mm	168×100×210	168×100×210	152×143×270	152×143×270
Weight	0.4kg	0.5kg	2.2kg	2.2kg
Colour	WHITE IVORY	WHITE IVORY	GRAY	GRAY
Material	ABS	ABS	ABS	ABS
Install Area	ACCOMMODATION	ACCOMMODATION	ACCOMMODATION	ACCOMMODATION

MODEL	LC-215A	LC-215C	LC-215AW	LC-217
PHOTO				
Mounting Type	FLUSH	FLUSH	FLUSH	PORTABLE
Gland	X	X	X	X
Signal Contact	O	O	O	X
Terminal Device	O	O	O	X
Headset	X	X	X	X
Dimmer	O	X	X/O	X
IP Grade	IP22	IP22	IP56	IP56
(WxDxH)mm	152×175×270	152×175×270	152×175×270	156×162×274
Weight	1.7kg	1.5kg	2kg	2.5kg
Colour	BLACK	BLACK	BLACK	GRAY
Material	ABS	ABS	ABS	STEEL/ABS
Install Area	CONSOLE	CONSOLE	WING CONSOLE	-

MRC

MAIN CABINET
MED-100 | MED-200 | MCX -5000 Series

LC-213C	LC-213E	LC-213G	LC-213G1
WALL	WALL	WALL	WALL
2	3	2	3
O	O	O	O
O	O	O	O
X	X	O	O
X	X	X	X
IP44	IP44	IP44	IP44
152×143×270	220×143×270	220×143×270	220×143×270
2.2kg	2.7kg	2.9kg	2.9kg
GRAY	GRAY	GRAY	GRAY
ABS	ABS	ABS	ABS
GALLEY, WORKSHOP	GALLEY, WORKSHOP	MACHINERY	MACHINERY

INTRINSICALLY SAFE TELEPHONE

MODEL	LIS-114	MRN-2000IS	LIS-117	IBT-100	IBT-200
PHOTO					
Cert No		IECEx BAS 17.0014X		IECEx BAS 17.0013	
Gland	1	X	X	6	6
IP Grade	IP44	IP22	IP44	IP44	IP44
Weight	2.9kg	0.7kg	4.1kg	8.5kg	8.5kg
Colour	BLACK	BLACK	BLACK	GRAY	GRAY
Material	ABS	ABS	ABS	STEEL	STEEL
Install Area	HAZARDOUS AREA	HAZARDOUS AREA	HAZARDOUS AREA	SAFETY AREA	SAFETY AREA
(WxDxH)mm	189×100×224	200×110×223	194×153×25	406×83×256	406×83×256

Accessories: **Auto Telephone**

ACCESSORY TELEPHONE (NEW VERSION)

MODEL	LAA-113A	LAA-114B	LAA-114C	LAA-114HB	LAA-114HC
PHOTO					
Mounting Type	WALL	WALL	WALL	WALL	WALL
Gland	X	2	3	2	3
Signal Contact	O	O	O	O	O
Terminal Device	O	O	O	O	O
Headset	X	X	X	O	O
Dimmer	X	X	X	X	X
IP Grade	IP56	IP56	IP56	IP56	IP56
(WxDxH)mm	189×100×224	189×100×224	189×100×224	189×100×224	189×100×224
Weight	2.9kg	2.9kg	2.9kg	2.9kg	2.9kg
Colour	BLACK	BLACK	BLACK	BLACK	BLACK
Material	ABS	ABS	ABS	ABS	ABS
Install Area	ACCOMMODATION	GALLEY, WORKSHOP	GALLEY, WORKSHOP	MACHINERY	MACHINERY

ACCESSORY VOIP PHONE VERSION

MODEL	LVD-111A	LVD-112A	LVD-113A	LVD-114B	LVD-114C	LVD-114HB
PHOTO						
Mounting Type	DESK	WALL	WALL	WALL	WALL	WALL
Gland	X	X	X	2	2	2
Signal Contact	X	X	O	O	O	O
Terminal Device	X	X	O	O	O	O
Headset	X	X	X	X	X	X
Dimmer	X	X	X	X	X	X
IP Grade	IP22	IP22	IP56	IP56	IP56	IP56
(WxDxH)mm	220×97×200	220×97×200	189×100×224	189×100×224	189×100×224	189×100×224
Weight	0.9kg	0.9kg	2.9kg	2.9kg	2.9kg	2.9kg
Colour	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
Material	ABS	ABS	ABS	ABS	ABS	ABS
Install Area	ACCOMMODATION	ACCOMMODATION	GALLEY, WORKSHOP	MACHINERY	MACHINERY	MACHINERY

MRC

MAIN CABINET
MED-100 | MED-200

LAA-115A	LAA-115D	LAA-116A	LAA-116D	LAA-117A
FLUSH	FLUSH	FLUSH	FLUSH	PORTABLE
X	X	X	X	X
O	O	O	O	X
O	O	O	O	O
X	X	X	X	X
X	O	X	O	X
IP56	IP56	IP56	IP56	IP56
189×100×224	189×100×224	189×100×224	189×100×224	194×153×255
2.9kg	2.9kg	2.9kg	2.9kg	4.1kg
BLACK	BLACK	BLACK	BLACK	BLACK
ABS	ABS	ABS	ABS	STEEL/ABS
CONSOLE	CONSOLE	CONSOLE	CONSOLE	-

LVD-114HC	LVD-115A	LVD-115D	LVD-116A	LVD-116D	LVD-117A
WALL	FLUSH	FLUSH	FLUSH	FLUSH	PORTABLE
3	X	X	X	X	X
O	X	O	O	O	X
O	O	O	O	O	X
X	X	O	X	O	X
X	X	O	X	O	X
IP56	IP56	IP56	IP56	IP56	IP56
189×100×224	189×100×224	189×100×224	189×100×224	189×100×224	194×153×255
2.9kg	2.9kg	2.9kg	2.9kg	2.9kg	2.9kg
BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
ABS	ABS	ABS	ABS	ABS	STEEL/ABS
MACHINERY	CONSOLE	CONSOLE	CONSOLE	CONSOLE	-

Accessories: **Auto Telephone**

ACCESSORY CONNECTION BOX ETC.

MODEL	JB-5A	JB-1A
PHOTO		
Mounting Type	WALL	WALL
IP Grade	IP56	IP56
Gland	2	2
Dimension(WxDxH)mm	153×110×160	153×110×160
Material	POLYCARBONATE	POLYCARBONATE
Colour	GRAY	GRAY
Weight	1.9kg	1.9kg
Install Area	FOR PORTABLE	FOR SHORE TEL

MODEL	BZ-7A	BZ-7B
PHOTO		
Mounting Type	FLUSH	WALL
IP Grade	IP22	IP22
Gland	X	X
Dimension(WxDxH)mm	89×60×156	89×60×156
Material	STEEL	STEEL
Colour	BLACK/IVORY	BLACK/IVORY
Weight	0.7kg	0.7kg
Install Area	–	–

MRC

MAIN CABINET
MED-100 | MED-200 | MCX -5000 Series

JB-61A	JB-62A	JB-63A	JB-63B
FLUSH	WALL	FLUSH	WALL
IP22	IP22	IP22	IP22
X	X	X	X
80×58×120	80×58×120	72×40×120	68×60×30
ABS	ABS	ABS	ABS
IVORY	IVORY	IVORY	IVORY
0.2kg	0.15kg	0.11Kg	0.11Kg
FOR DESK TEL	FOR DESK TEL	FOR DESK TEL	FOR DESK TEL

RB-25	MR-2000	MRN-2000	ATC-2000'S
WALL	-	-	-
IP44	IP22	IP22	IP22
5	X	X	X
140×79×254	200×110×223	200×110×223	5M/10M/15M
ABS	ABS	ABS	PVC Jacket
GRAY	BLACK	BLACK	GRAY
1kg	0.7kg	0.7kg	0.2kg
SAFETY AREA	SAFETY AREA	MACHINERY("N" TYPE TEL)	PORTABLE TYPE TEL