

Cabinet system RACK 19" **DSO-PRA** for BOSCH PRAESENSA system



System configurator for DSO-PRA - Bosch PRAESENSA

CONFI-DSO program for designers that supports configuration of DSO system developed together with BOSCH Company

DSO-PRA - 19" RACK cabinet for Praesensa DSO system



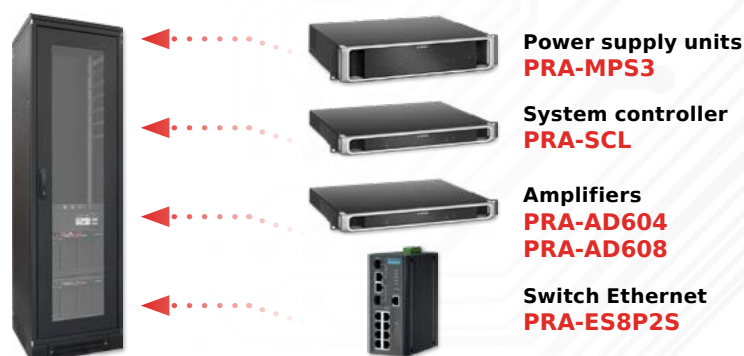
System features

- RACK 19" system dedicated to DSO PRAESENSA system;
- CONFI-DSO program for designers that supports configuration of DSO system, developed together with BOSCH Company;
- PSG3LA LED panel for optical and acoustic indication compliant with PN-EN54-16 standard for evaluating DSO system operation;
- LZxxxx safety strip with overcurrent fuses, surge arresters and a dummy connector;
- Single-phase or 3-phase power supply;
- 230 V AC LDxxxx voltage distribution terminal;
- Grounding terminals;
- Dimensions of RACK cabinets:
 - 24U (600×600);
 - 36U (600×600);
 - 42U (600×600, 600×800);
 - 45U (600×600, 600×800);
 - 50U (600×800);
- Protection Class: IP30;
- Batteries included;
- Mounting bracket for batteries;
- Mounting shelves for each cluster;
- Enclosure of DSOS24V-PU firefighter's microphone - available as an option;
- AWO506 End of Line (EOL) Supervision Board - available as an option;
- Possibility of assembling wheels instead of plinth - optional;
- Forced cooling - fan panel with a thermostat, optional accessory for 24U, standard for 36U, 42U, 45U, and 50U;
- Warranty:
 - DSO-PRA cabinet - 2 years from production date;
 - Batteries - 1 year from installation date.

DSO-PRA - 19" RACK cabinet for Praesensa DSO system

19" DSO-PRA RACK cabinet is designed for installation of PRAESENSA voice alarm system devices by Bosch. Devices of DSO system are placed in 19" RACK cabinet together with appropriate battery banks.

CONFI-DSO PRAESENSA program is designed for proper and fast configuration of DSO cabinet; based on implemented design parameters, program selects a complete power supply system taking into account required backup time.



Design of Voice Alarm System

Design and all components of DSO are based on RACK 19" cabinet (Protection Class: IP30), containing all components of system. Depending on system and number of devices, height of cabinet is adjusted individually.

Available dimensions are:

24U (600×600), 36U (600×600), 42U(600×600, 600×800), 45U (600×600, 600×800), 50U (600×800).



H	W	D
24U	600	600
36U	600	600
42U	600	600
42U	600	800
45U	600	600
45U	600	800
50U	600	800

LZxxxx safety strip

Safety strip is fitted with circuit breakers, surge arresters, and maintenance socket. Main circuit breaker disconnects 230V/400V mains from all system devices. In addition, power supply circuit is fitted with circuit breaker allowing its disconnection, without disconnecting other devices of DSO, e.g. for maintenance purposes. In addition to main switch, it is fitted with „type 3" surge arresters compliant with EN 61643-11 standard.



230 V AC LDxxxx voltage distribution terminal

Voltage distribution terminal is equipped with 230V connection sockets and it is used to supply components of DSO. Depending on number of devices and amount of power consumption, terminal can have 1-phase or 3-phase connection. 3-phase version enables more uniform load per phase of power grid. Terminal is placed in back of cabinet.



PSG3LA panel for optical and acoustic indication

Panel for optical and acoustic indication compliant with EN54-16 standard indicates status of entire DSO system. It is equipped with three LEDs, sounder and reset button of acoustic indication.



Fan unit with thermostat

for RACK cabinets: 36U / 42U / 45U / 50U – standard equipment

for RACK cabinets: 24U – available as option

DSO cabinet is equipped with ventilation panel located in upper part of cabinet to force air flow to devices emitting heat. Fans are controlled by a nearby bimetallic thermostat that allows setting activation temperature in range 0-60°C with adjustment knob. Fans are powered from 230V mains; in case of power loss, they are switched off.



Batteries included

System is supplied with properly selected capacities of batteries in scope from 100 to 230 Ah, depending on the power dedicated to single cell.

Correct operation of battery circuit is controlled by the Bosch multifunctional PRA-MPS3 power supply.



AWO506 – Enclosure for loudspeaker line supervision of DSO system Presideo, Paviro, and Plena by BOSCH

Enclosure is designed for mounting loudspeaker line supervision systems by Bosch used in Voice Alarm Systems. Design of enclosure allows mounting Praesideo, Plena, and Paviro systems by BOSCH.

Enclosure is fitted with four cable glands allowing connecting loudspeaker wires with maximum diameter of 10mm.

Available as option
in CONFIG-DSO



DSOS24V – Firefighter's microphone power supply for Voice Alarm Systems 24V

DSOS24V-PRA is designed for uninterruptible power supply of call stations (firefighter's microphone) used in DSO (Voice Alarm Systems) requiring stabilized voltage of 48 V DC (-5%/+5%).

In case of lack of main power, battery back-up is activated immediately. Power supply unit is placed in metal enclosure (color red RAL 3001) with space for 2x 17Ah/12V batteries. Power supply unit uses maintenance – free, AGM or gel batteries (17Ah/12V).

Available as option
in CONFIG-DSO



PSU features

- Conformity with EN 54-4:1997+AC:1999+A1:2002+A2:2006, and pt. 12.2 according to Decree of the Ministry of Internal Affairs and Administration of 20.06.2007 (Journal of Laws No. 143, item 1002), as amended on 27.04.2010.
- Power supply for call station of DSO system, e.g. PRA-CSLW, PRA-CSLD and four PRA-CSLW, PRA-CSLD extensions by BOSCH
- 48 V DC uninterruptible power supply
- Recommended batteries 2x 17Ah /12V
- Built in DC/DC converter 24V/48V
- Low ripple voltage
- Microprocessor based automation system
- Measurement of resistance of battery circuit
- Automatic temperature compensation of battery charging
- Battery test
- Two-phase battery charging
- The accelerated battery charging function
- Battery circuit continuity control
- Battery voltage control
- Battery fuse status control
- Battery charging and maintenance control
- Deep discharge battery protection (UVP)
- Battery overcharge protection
- Battery output protection against short circuit and reverse connection
- Output voltage control
- Technical outputs – relay type
- Output of collective failure ALARM
- EPS technical output indicating 230 V AC power loss
- LED optical indication
- Protections:
 - SCP short-circuit protection
 - OLP overload protection
- Convection cooling
- Warranty – 3 years

DSOS24VPU – Enclosure for firefighter's microphone for DSO (Voice Alarm System)

DSOS24VPU metal enclosure is designed for mounting PVA-15C ST call station of PAVIRO by BOSCH and up to two PVA-20CSE call station extensions.

Available as option
in CONFIG-DSO





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Devices

Cluster 1 Cluster 2 Cluster 3 Cluster 4 Cluster 5 Cluster 6

Cluster 1 Cluster 2 Cluster 3 Cluster 4 Cluster 5 Cluster 6

Description	Device	
Multifunction Power Supply	PRA-MPS3	
	Active Ethernet ports on MPS	0
	Active SFP ports on MPS	0
24VDC output	PRA-SCL (System controller)	
	Active Ethernet ports on MPS	1
48VDC output 1	PRA-AD608 (500 W-8 channel)	
	Active Ethernet ports on MPS	1
	Total loudspeaker load [W]	600
48VDC output 2	-	
48VDC output 3	PRA-AD608 (500 W-8 channel)	



Accessories

Wheels set ☐

Fan unit with thermostat ☒

D DS02-4VPU - enclosure for firefighter's microphone

Enclosure for loudspeaker line supervision

Firefighter's microphone shelf ☒




Results								⌵
	Clusters	1	2	3	4	5	6	
		[Ah]	106	67	0	0	0	0
Required battery capacity incl. safety factor (100 - 230Ah)	[Ah]	106	67	0	0	0	0	
Maximum battery current (check battery specification)	[A]	47	24	0	0	0	0	
Mains current draw at 230 V AC (during alarm and maximum battery charging)	[A]	2,699	1,375	0	0	0	0	
Mains current draw at 115 V AC (during alarm and maximum battery charging)	[A]	5,398	2,75	0	0	0	0	
Battery selected automatically / by the user	[Ah]	200	100	0	0	0	0	



The screenshot shows the AWS IAM console 'Groups' page. A modal dialog for creating a new group is open. The 'Name' field contains 'devops', 'Permissions boundaries' is set to 'AWSManagedLinuxFullAccess', and 'Users' is set to 'root'. The 'Create' button is highlighted in orange.


[illegible]



CONFI-DSO PRAESENSA v1.0

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BOSCH
Technologia białej rasy

Input data


Hold time [h] 24
 Alarm time [h] 0.5
 Ind. safety [N] 30
 Extra space U in the cabinet 2
 Rack depth [mm] 600

Devices

Cluster 1 Cluster 2 Cluster 3 Cluster 4 Cluster 5

Description	Device
Multifunction Power Supply	PRA-MPS3
Active Ethernet ports on MPS	
Active SFP ports on MPS	
24VDC output	PRA-SC1 (System controller)
Active Ethernet ports on MPS	
48VDC output 1	PRA-AD608 (600 W 8 channel)
Active Ethernet ports on MPS	
Total loudspeaker load [W]	
48VDC output 2	-
48VDC output 3	PRA-AD608 (600 W 8 channel)
Active Ethernet ports on MPS	
Total loudspeaker load [W]	
Call station desktop/wallmount	PRA-CSL/D / PRA-CSLW
Call station desktop	PRA-CSL D

Configuration code: DSO-PRA-D960000/311110



Results

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Battery selected automatically / by the user	[Ah]	200	100	0	0	0	0

	Active (idle)	Active	
Total power loss of amplifiers	[W]	144	372
Total heat loss (heat dissipation within the rack)	[BTU/h]	492	1270

RACK cabinet height	[u]	42
RACK cabinet height	[mm]	2103
RACK size		600x600
RACK cabinet weight	[kg]	89
Battery weight		91.19999999999999
Installation weight (with batteries and devices)	[kg]	214

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