

## DC Supply for PABX System

## DCBS SERIES

The PABX-DBS unit is a robust and extremely reliable DC battery eliminator / battery charger which provides a smooth, regulated DC output despite large mains and load variations. The unit complies with Telcom's regulations and produces less than 2mv Psophometric ripple (referred to 800Hz).

The unit is of the full wave thyristor regulator type and has the advantage of rugged simplicity and high reliability with low heat dissipation. Protection is provided electronic current limiting and fuses. An important feature of this is parallel operation. This means high current capability and parallel redundant reliability. A further feature in parallel operation, is that units may be removed or replaced on load.

The unit can be supplied in ST format (standard unit), SR format (semi-redundant unit).

The standard configuration includes power fail alarm, over voltage alarm, voltmeter and ammeter. Additional options are available such as battery low alarm and low voltage disconnect which will prevent a deep discharge of the battery bank.

The battery banks can be supplied in either a free standing steel frame (see above picture) or in a matching battery cabinet. The standard battery set is of a semi-sealed maintenance free lead acid type with a life span of 4-6 years.

The units are supplied in a standard steel cabinet which can be either free standing or wall mounted.



### **PABX DC-UPS BACKUP SYSTEM ST (Standard Unit)**

The ST PABX DC-UPS Backup System is a single along DC UPS / battery charger system. The unit includes a DC over voltage alarm and a mains fail alarm. The charger unit and the battery stand or box, are separate units (see table for Battery Stand/Box sizes). The charger box is constructed in such a way that it is either free standing or wall mountable.

### **PABX DC-UPS BACKUP SYSTEM SR (Semi Redundant Unit)**

The SR PABX DC-UPS Backup System is a semi-redundant stand along DC UPS / battery charger system. The unit includes a DC over voltage alarm and a mains fail alarm. The system comprises of a single main transformer and a DC choke. The rectifier bridge and the electronic firing circuit are duplicated. A simple relay control circuit is used to control the system on a hot standby basis, i.e. the system will run off the master bridge as standard. In the unlikely event of the master bridge failing, a second bridge will operate until the master bridge is restored. Blocking diodes are provided to prevent reverse power into the faulty bridge. A faulty firing module (circuit board) can be replaced live. Alarms and indications are given for master fail and standby in operation. The charger unit and the battery stand / box are separate units ( see table for Battery Stand/Box sizes). The charger box is constructed in such a way that it is either free standing or wall mountable.

### **PABX DC-UPS BACKUP SYSTEM FR (Fully Redundant Unit)**

Two completely identical units with extra electronic circuitry to allow full redundancy.

### MODELS for Standard (ST) DC BackupSystem with external battery packs

MODEL	BACKUP TIME	PABX MOD	AC INPUT CURRENT	DC OUTPUT VOLTAGE	DC OUTPUT CURRENT	SIZE WxHxD in mm
Sine 1265/1 ST	8 Hrs	1	4,0 Amps	54 V DC	12 Amps	600 x 760 x 325
Sine 20100/2 ST	8 Hrs	2	6,7 Amps	54 V DC	20 Amps	600 x 760 x 325
Sine 30200/3 ST	8 Hrs	3	10,3 Amps	54 V DC	30 Amps	600 x 760 x 325
Sine 40200/4 ST	8 Hrs	4	13,5 Amps	54 V DC	40 Amps	600 x 760 x 325
Sine 70300/6 ST	10 Hrs	6	23,6 Amps	54 V DC	70 Amps	600 x 1000 x 325
Sine 70300/8 ST	8 Hrs	8	23,6 Amps	54 V DC	70 Amps	600 x 1000 x 325

### MODELS for Semi-Redundant (SR) DCBackup System with external battery packs

MODEL	BACKUP TIME	PABX MOD	AC INPUT CURRENT	DC OUTPUT VOLTAGE	DC OUTPUT CURRENT	SIZE WxHxD in mm
Sine 1265/1 SR	8 Hrs	1	4,0 Amps	54 V DC	12 Amps	600 x 760 x 325
Sine 20100/2 SR	8 Hrs	2	6,7 Amps	54 V DC	20 Amps	600 x 760 x 325
Sine 30200/3 SR	8 Hrs	3	10,3 Amps	54 V DC	30 Amps	600 x 760 x 325
Sine 40200/4 SR	8 Hrs	4	13,5 Amps	54 V DC	40 Amps	600 x 760 x 325
Sine 70300/6 SR	10 Hrs	6	23,6 Amps	54 V DC	70 Amps	600 x 1000 x 325
Sine 70300/8 SR	8 Hrs	8	23,6 Amps	54 V DC	70 Amps	600 x 1000 x 325

### MODELS for Battery Stands / Boxes – ST and SR System

MODEL	DESCRIPTION	SIZE WxHxD in mm	MOD EL	DESCRIPTION	SIZE WxHxD in mm
4BS35	Batt Stand for 4 x 12V/35Ah	405 x 980 x 220	BB4	Battery Box for 4 Batteries	800 x 500 x 500
4BS45	Batt Stand for 4 x 12V/45Ah	405 x 980 x 220	BB8	Battery Box for 8 Batteries	800 x 830 x 500
4BS66	Batt Stand for 4 x 12V/66Ah	380 x 980 x 300			
4BS102	Batt Stand for 4 x 12V/102Ah	380 x 980 x 355			
8BS102	Batt Stand for 8 x 12V/102Ah	355 x 980 x 750			

### MODELS for Battery Eliminator (Power Supply on battery pack required)

MODEL		PABX MOD	AC INPUT CURRENT	DC OUTPUT VOLTAGE	DC OUTPUT CURRENT	SIZE WxHxD in mm
Sine 0717/1 BE		1	2,5 Amps	48 V DC	7 Amps	600 x 760 x 325
Sine 1265/ BE		2	4,0 Amps	48 V DC	12 Amps	600 x 760 x 325
Sine 20100/3BE		3	6,7 Amps	48 V DC	20 Amps	600 x 760 x 325
Sine 20200/4BE		4	6.7 Amps	48 V DC	20 Amps	600 x 760 x 325
Sine 30300/6 BE		6	10.3 Amps	48 V DC	30 Amps	600 x 760 x 325
Sine 40300/8 BE		8	13.5Amps	48 V DC	40 Amps	600 x 760 x 325

### TECHNICAL SPECIFICATIONS

Input Voltage	230V AC	Input Range	+ 15 %
Input Frequency	50 Hz ± 5Hz	Output Voltage	54 V DC (internally adjustable)
Output Regulation	+ 1%	Output Ripple	<0.3% at 100 Hz
Communication	2 mV Psophometric (referred to 800 Hz)	Complies to Telkom specifications	
Protection	AC Input or Circuit Breaker	DC Battery Circuit Breaker	
	Loss of Feedback Shutdown	Electronic Current Limiting	
	Search Protection RC Network and MOV		
Metering	DC Voltmeter and DC Ampmeter		
Indication	AC Power on LED	DC Over voltage LED	
Optional Extras	DC Under voltage Alarm	Parallel Operation	
	Under voltage Load Disconnect DC Contactor (to prevent battery deep discharge)		
Cooling	Convection		
Warranty	One year standard warranty	MTBF	7 Years by Field Experience

We reserve the right to change specifications without prior notice

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