

# POWER SUPPLY

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## SIP-500(6+6) series



- ➔ +13.5V/6A Voltage Regulator
- ➔ 6A Battery Charger
- ➔ Mains/Battery Change-over
- ➔ Multiple Protection
- ➔ Light & Tone Signalling
- ➔ Built-in Loudspeaker

# POWER SUPPLY SIP-500(6+6) series

## DESIGNATION and DESCRIPTION

Regulated power supply SIP-500(6+6) series is primary dedicated for supplying MRS-500 series transceivers, which are used in Fixed and Base station configurations. There are two equipment, differing in colour: **SIP-500(6+6)Z** - Black mat, **SIP-500(6+6)Z/V** - Olive gray.

Electrical specifications and dimensions are in accordance with mentioned transceivers and their operating modes in specific configurations. Device comprises two low-

voltage DC current sources - Voltage Regulator and lead-acid Battery Charger.

Built-in speaker and microphone socket are provided to simplify configuring the Fixed Station. The supply line, together with those of loudspeaker and microphone, goes through dedicated cable, to the supplied transceiver. Additional connector is provided for supplying other transceivers, whose power consumption does not exceed maximum output current of the device

## FEATURES

- Simultaneous transceiver supplying and battery charging. In absence of the mains voltage, battery is automatically switched to transceiver.
- Automatically changeover to supply from battery is provided also, in case that mains voltage drops under specified value
- Battery is charged according to **I/U** model: the first phase with constant current, until full battery voltage is achieved; and the second phase, with constant voltage ("trickle charging").
- Overload and short circuit protection is provided with melting fuses and internal electronic circuit on both -

Voltage Regulator and Battery Charger. Equipment is protected also against polarity reversal during battery connection.

- Audio and light signalling follow activation of any protection, as well as mains voltage drop under specific value.

SIP-500 operating range, in which it sustains all electrical and functional characteristics, corresponds to simplex transceiver's common duty cycle: **10% of time with transmitter's and 90% with receiver's consumption**, at simultaneous charging of the battery with specified current according to I/U model.

**Note:** SIP-500 is not designed for continuous maximum load on both low voltage sources.

## ELECTRICAL CHARACTERISTICS

### GENERAL

Mains voltage range ( $V_{AC}$ )	$220 \pm 10\%$
Operating temperature range ( $^{\circ}C$ )	$-5 \div +55$
Storage temperature range ( $^{\circ}C$ )	$-40 \div +70$

### VOLTAGE REGULATOR

Output voltage ( $V_{DC}$ )	$13,5 \pm 0,5$
Maximum output current ( $I_{DC}$ )	6.0
Output voltage AC component (mVeff)	$\leq 35$
Change-over mains voltage ( $V_{AC}$ )	$185 \pm 3$

### BATTERY CHARGER

Charging current (A)	$\leq 6$
Full battery voltage (V)	$14,5 \pm 0,2$
Low limit battery voltage (V)	$10,5 \pm 0,2$

- May be changed without notice -



*Fixed Station Configuration  
- typical SIP-500 application -*