

Purpose:

the manpack charger PZU-4 is designed for charging of a wide range of the batteries of low-power portable radio stations, excluding damage of the battery due to an operator's error.

Advantages:

the manpack charger «PZU-4» is a four-channel charger with a software control, designed in a case, which provides convenient carrying of the charger.

The manpack charger PZU-4 provides:

- simultaneous charge/ discharge of up to four batteries of different types;
- battery charge and discharge in the following modes:
 - a) nominal mode:
 - discharge current $0,2C_H$, A, where C_H – a battery rated capacity;
 - charge current $0,1C_H$, A;
 - b) accelerated mode:
 - discharge current $0,2C_H$, A;
 - charge current $0,2C_H$, A;
 - c) fast mode
 - discharge current $0,33C_H$, A;
 - charge current $0,33C_H$, A;
 - d) peak mode
 - discharge current $1,0C_H$, A;
 - charge current $1,0C_H$, A;
- peak charge current deviation $\pm 5\%$;
- peak discharge current deviation $\pm 2\%$;
- automatic setting of charge and discharge parameters (according to the battery type and selected mode);
- discharge automatic completion at the voltage across the battery $10 \pm 0,5$ V;
- charge of strongly discharged batteries (the battery current voltage - from 7,3 till 10 V) with a displayed message about the battery deep discharge;
- charge completion audio alarm;
- short-circuit protection in storage circuit with a displayed message and audio alarm in charge/ discharge mode;
- battery open-circuit protection with a displayed message and audio alarm in charge/ discharge mode;
- displayed information:
 - battery type;
 - cycle state (charge/discharge);
 - operation mode;
 - current and U charge voltage;
 - battery capacity, returned during battery discharging;
 - battery capacity, accumulated during battery charging;
 - time remaining till charge completion;
 - charge completion;
 - battery circuit failure (short circuit, open-circuit);
- operation mode restoration after power supply voltage shutdown within less than 30 minutes;
- connection indication;
- recovery and charge of the batteries, susceptible to discharge under accepted limit (deep discharge);
- opportunity of connection of 10NKGTS-1D, 10NKGTS-1,1, 10NKGTS-1,2, 10NKGTS-1,7, 10NKGTS-1,8, 10NKGTS-5, 10NKGTS-8,0, 10NKP-8, 10NKP-10, 10NKBN-3,5, 10V.KSM10R batteries and their complete analogues;
- opportunity of the chargeable batteries' types expansion by reprogramming of charge and recharge modes as well as using a flexible or optional battery switchboard or additional panel.



Operation conditions:

The manpack charger PZU-4 provides reliable operation at the ambient temperature $-10^{\circ}\text{C} \dots +40^{\circ}\text{C}$ and relative air humidity up to 98% at the temperature 25°C (of the climatic version "humid microthermal climate", category 3, GOST standard 15150). Continuous and full - time operation mode.

The manpack charger PZU-4 operates with forced fan cooling with automatic adjustable speed.

The manpack charger PZU-4 is not designed for installation and operation in explosion hazardous and fire dangerous areas according to the technical code of common practice 339.

Requirements to power supply:

Power supply of the manpack charger PZU-4 is realized from AC mains with voltage $230\text{V} \pm 10\%$, frequency $50 (\pm 1) \text{ Hz}$, or from on-board DC power supply of voltage $27 (+3/-6) \text{ V}$.

Power consumption of the manpack charger PZU-4 is less than:

- 900 W DC power supply, rated voltage is 230 V;
- 120 W DC power supply, on-board power supply, constant voltage is 27 V.

Dimensions (WxHxD) – less than 580x367, 5x341 mm.

Charger weight – less than 12,5 kg.

Charger installation time – less than 1 min.

Serial production has been realized since 2015.

Note: *Technical characteristics may be changed according to the Customer's requirements.*

