



## Battery Charger E1401

The energy supply systems of navigation aids have to function reliably during long time without any maintenance. When using alternative energy sources - solar panels and wind generators -, a challenge arises: to keep the batteries as full as possible while not overcharge them. Overcharging leads to boiling out of the electrolyt and thus, to the damage of the batteries. Therefore, EKTA has taken special efforts to find out the most efficient methods of charging the batteries and, as a result, the battery charger E1401 has been developed

### Features

- Charging of 12V NiCd and/or Pb batteries. Charging current up to 16A
- Using of solar panels (e.g. LA K51) and/or wind generators (e.g. Windside) as energy sources
- Automatic control of charging current, depending on the environmental temperature and the charge rate of the battery
- Protection of the batteries against overcharging and overloads
- Protection of the power supply system against the lightning discharges and other noises by dedicated input filters (optional)
- Hermetic design, the case filled with the nitrogen gas

### Specification

<b>Battery nominal voltage</b>	12V
<b>Battery types</b>	NiCd, Pb
<b>Energy source 1</b>	solar panels, e.g. LA361 K51
<b>Energy source 2</b>	wind generator, e.g. WINDSIDE W0,3
<b>Total input current</b>	max16A
<b>Maximum load current from the batteries</b>	2.5A
<b>Charging end voltage of NiCa batteries</b>	14.6V, at the $t^{\circ}=20^{\circ}\text{C}$ to be set with external resistor
<b>Charging end voltage of Pb batteries</b>	13.6V at the $t^{\circ}=20^{\circ}\text{C}$ , to be set with external resistor
<b>Inputs</b>	4 inputs from solar panels 4x4A, 1 input from wind generator

<b>Outputs</b>	1 output to the battery, 1 output to the basic load, 3 outputs to the setting resistors, 5 measurement outputs, 1 output to the thermoresistor
<b>Temperature range</b>	-30°C to +55°C* (IEC-2-1, 2, 14)
<b>Relative humidity</b>	max 98% at +35°C (IEC 68-2-3)
<b>Dimensions</b>	210x70x180mm
<b>Weight:</b>	2.2kg

\*) the temperature range can be optionally extended

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