

Power supply BIC-2200 cascading

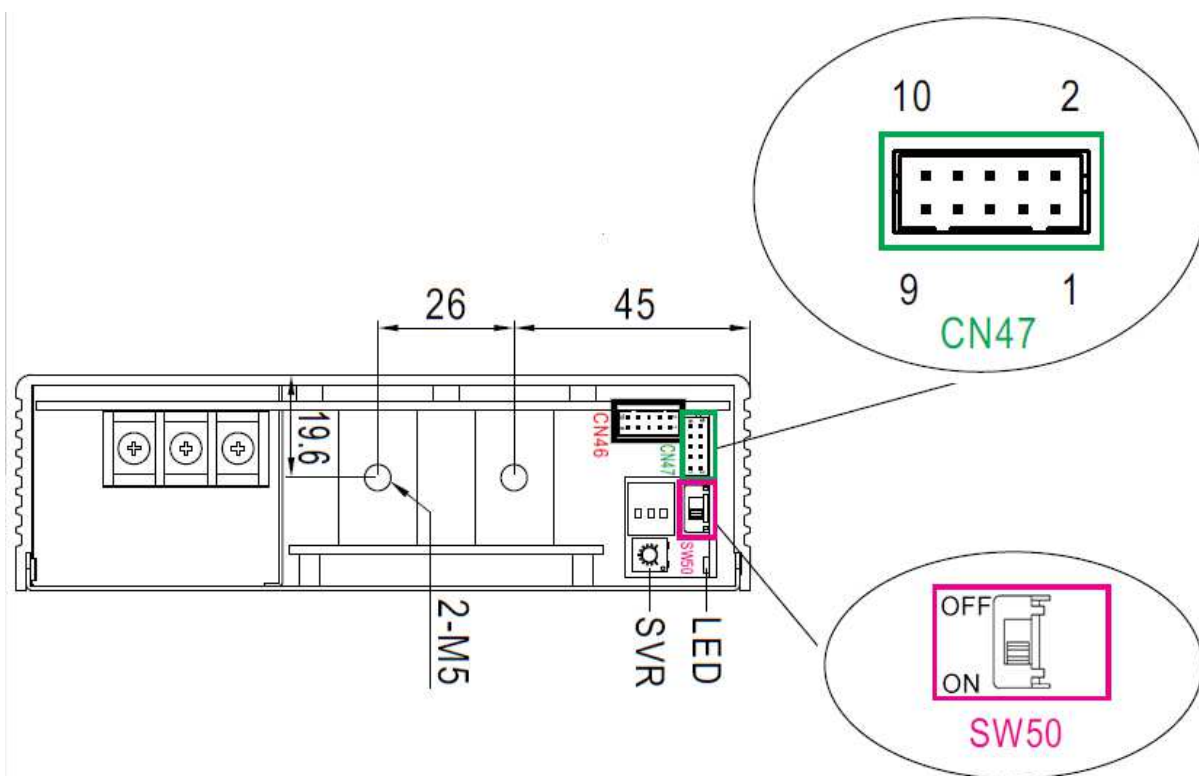
To increase the power of the bidirectional power supply unit, Mean Well BIC-2200-48, the power supply units can be connected in parallel (cascaded) at the output. This allows the total output power to be doubled from 2,160 W to 4,320 W. The regenerative power is also doubled from 1,800 W to 3,600 W. However, it is important to remember that earthed sockets in households are normally fused with 10 A or 16 A.

To determine the permissible power, the voltage is multiplied by the current. The maximum power of a household socket is therefore 3,680 watts or 3.68 kW (230 V x 16 A). If the power is exceeded, the fuse normally switches off. With a 10 A fuse, only 2,300 W will be possible - so be sure to check at the fuse box before starting up!

Before charging/discharging at cascaded power supplies, it is essential to check for which continuous load (A) the electrical installation of the house is actually designed. Overloading can lead to heat development and fires.

When using a Pulsar 3+ on parallel connected power supplies, it will not be possible to exceed the permissible power on the household circuit with a 16 A fuse - provided that no other power consumer is operated on the same circuit at the same time. When operating several Pulsar chargers on the power supply units, the maximum charging and discharging power can be set in the setups so that the permissible power of the socket is not exceeded. However, the efficiency of the power supply units (approx. 90 %) must also be taken into account here.

To connect the power packs for parallel operation (master > slave), plus and minus are bridged from the respective output and a control line is connected between the CN47 sockets of the two power packs. The switch SW50 on both power packs remains in the ON position. Cascading of up to five power supply units is possible; the corresponding switch positions and connections of the control line can be found in the data sheet of the power supply units.



BIC-2200
PSU1

BIC-2200
PSU2

