

SPECIFICATIONS

Power supply

The circuit is powered by 220V - 0.1 A It can also be powered by an external 12V battery.

A backup battery 12V / 7Ah ensures a range of about 24 hours in case of power failure (without printer). An internal circuit ensures that the battery charges. A second circuit protects the battery from deep discharge by stopping the fish counter. In the case of using an external battery, power supply by the mains and the charging circuit are not used, only the protective circuit against deep discharge remains in service.

The power supply of electronics is:

- Voltage 11 to 14V
- Maximum current 280 mA (without the printer) for a conductivity of 1000 $\mu\text{S} / \text{cm}$.

The power supply of the internal circuit is made from two 5V power supplies. Both power supplies are electrically insulated. The insulation voltage is 1000V. The insulation between the circuits connected to the submerged electrodes and the processing circuit is provided by optocouplers with an insulation voltage greater than 1000V.

Measurements

The automatic rebalancing of the measuring bridge can offset imbalance of + / - 10%. The gain of amplifiers allows measurements to be made for conductivity ranging from 100 to 1000 $\mu\text{S} / \text{cm}$.

Note: the rebalancing can catch up an imbalance greater than the one caused by a big fish (6%

at 100 $\mu\text{S} / \text{cm}$).

User interface

Dialogue with the fish counter is done by using an LCD display with two lines of 40 characters (without accents) and a 16-key keypad.