



# FOX-320

## Product description

The FOX-320 is a solar charge controller for modulated currents up to 20 A, suitable for AGM, gel and lead-acid batteries. Consumers can be connected up to a current consumption of 20 A maximum.

The adaptive total discharge protection monitors and protects the battery against damaging total discharge and alternatively the nightlight function can be used.

The optimised charge characteristic curve in combination with the hardware PWM control achieves a distinctly faster and gentler charging of the battery; hazardous gassing or overcharging are safely prevented. The FOX-320 can charge two battery systems.

Ex factory, 90 % of the power are charged to battery 1 and 10 % of the power to battery 2. The consumer current is always taken from battery 1.

On switching on, the controller recognises fully automatically whether a 12 V or 24 V battery system is connected. The active battery cut-out ensures the protection against reverse current and allows for an extremely low voltage drop between module and battery.

The FOX-320 can at any time be connected to the Multi Display FOX-MD1 by simple plug-in. This allows the current voltages and flows to be displayed, even graphically. The programming function of the FOX-MD1 enables to change and save various parameters.

## Field of application



- ~ for motor boats and sailing yachts
- ~ for camping und caravans
- ~ for mobile current supply

## Technical features

Technical features	Value/Unit
System voltage	12 V / 24 V automatic
Operating voltage	8,5 V ... 35 V
Power required by the unit	12,0 mA
- with FOX-MD1	15,0 mA
Overcharge protection	max. 20 A @ 25° C
Temp. compensation	-20mV/°K @12V, -40mV/°K@24V
Max. terminal voltage	50V (Uoc on module label)
Total discharge protection	max. 20 A @ 25°C
- Switch-on/switch-off delay	1 min
Nightlight function	max. 20 A @ 25°C
- Switch-on/switch-off delay	10 min
<b>Displays</b>	
- Battery status display	LED (multi-colour)
- Charge current display	LED (yellow)
- Output status display	LED (multi-colour)
Battery selector switch	Relay, bistable
Terminals	VA screw, max. 16mm <sup>2</sup>
Voltage loss	0.0 – 0.27 V (@ 0 - 20 A)
Type of protection	IP 22
Ambient/storage conditions	-25° C ... + 50° C, non-thawing
Weight	300 g

*Technical changes reserved*

### Special features

- 2 battery systems charge
- Suitable for AGM-, gel- und lead-acid-batteries
- Auto-sensing of system voltage (12/24V)
- Expandable with remote display and programming unit FOX-MD1 (with backlit display)

### Display masks

When the FOX-320 is connected to the FOX-MD1 the following display values are shown:

### Dimensioning

mm [inches]