

**iesy SmartFuse => 3 in 1**

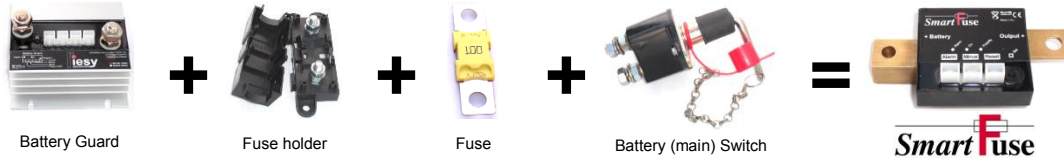
(no relay but MOSFET switches, and therefore no sparks!)

The iesy SmartFuse is an Battery Guard/Protect + „Fuse“ which can detect under voltage, over voltage, over current (overload) and disconnect the circuit. The voltage- and current values are programmable. The SmartFuse can be used with a (little) remote switch as a Battery(Main)Switch. Instead of three different individual products, you have with one SmartFuse reducing in costs in purchasing and installation time.

After shutdown (SmartFuse) the consumers by under voltage from the battery, the SmartFuse let charge current through to the battery from the charger, while load is disconnected. For example, by a “combi” inverter (inverter/charger/AC transfer switch combination) so that the battery can be recharged. Only when the “on” voltage has reached from the SmartFuse, then is it possible to get again current/power from the battery.

SmartFuse properties:

- ✓ Battery Guard/Protect which can detect under voltage, over voltage, over current (overload) and disconnect the circuit.
- ✓ Programmable electronic fuse => Six current values 75-250A
- ✓ To connect the equipment safely without any spark at the battery
- ✓ Battery Main Switch=> Activate or de-activate the SmartFuse is possible with a (little) remote switch
- ✓ After overload/over current shutdown=>Activation with a pushbutton
- ✓ To prevent deep discharge of the battery => Four under voltage programs
- ✓ Charging the battery is possible in case of under voltage shutdown (disconnecting user)
- ✓ Alarm output for signalling or to connect for example a generator or battery charger. In case of under voltage, it will start and if the battery is full, stopped.
- ✓ Reverse polarity protection of plus / minus battery
- ✓ Over voltage shutdown (>16V@12V mode, >32V@24V mode)
- ✓ Watertight IP67 housing



**Series iesy SF SmartFuse**



[www.smartfuse.eu](http://www.smartfuse.eu)

**SmartFuse 250A / 12-24Vdc auto detect**

- ✓ SmartFuse is fast with overload, normal fuse is slow. No sticking or burning in of contacts possible, likewise no sparks or oxidation of the contacts, as with large DC currents, by use a relay happens
- ✓ High overload capability (ideal for starting 'Serious' heavy load)

iesy SmartFuse	auto detect	Shutdown current (6 programs)	Under-/upper voltage threshold ( 4 programs)	Peak current	Weight	Dimension TxWxH
SF250	12 / 24V	75-100-125-	12V Modus: 9,5-11,3V / 12,8V	500A@5sec.	0,5 kg	52x115x46mm
SF250 + MP		200-150-250A	24V Modus: 19-22,6V / 25,6V		0,7kg	100x115x52mm

**Specifications SmartFuse 250:**

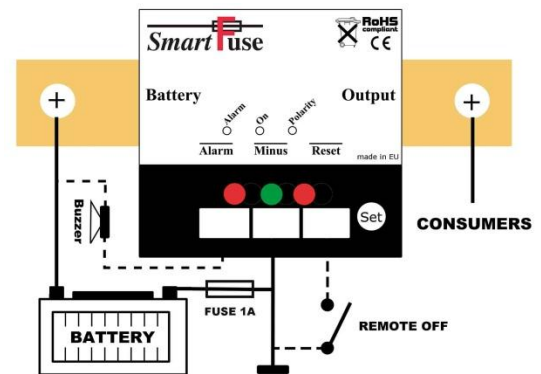
Input voltage 12/24V auto detect  
 Output current 250A  
 Over load (current) 500A @ 5 seconds  
 Over voltage shutdown >16V@12V mode >32V@24V mode  
 Shutdown current Programs 6 (1 - 6)  
 Shutdown voltage Programs 4 (1 - 4)  
 Activate and de-activate connection:  
 Remote OFF=> SmartFuse ON; Remote ON=> SmartFuse OFF.  
 Alarm contact: max. 1A (12/24Vdc), switches with Alarm LED  
 Reverse polarity protection  
 Standby current: active 5mA  
 Switched off 1,5mA  
 Short circuit protection / ground loss proof

**Programming Table**

Program	Value	DC cable diameter (L<5m)
1	75 A	Ø 25mm <sup>2</sup>
2	100 A	Ø 35mm <sup>2</sup>
3	125 A	Ø 50mm <sup>2</sup>
4	150 A	Ø 50mm <sup>2</sup>
5	200 A	Ø 70mm <sup>2</sup>
6	250 A	Ø 95mm <sup>2</sup>
1	10,5V / 21V: off	12,8V/25,6V: on
2	10V/ 20V: off	12,8V/25,6V: on
3	9,5V / 19V: off	12,8V/25,6V: on
4	11,3V / 22,6V: off	12,8V/25,6V: on



SmartFuse + Mounting Plate



Specials and/or private label on request / For more information see Manuals