

# **Σ-Ahr Smart Diode**

New improved industrial applications need fast response reverse polarity protection including current measurement. The TSS  $\Sigma$ -Ahr Smart Diode satisfies this requirement with a very low forward voltage drop to reduce the power losses. One of the key functions of the unique smart diode include sub-system blocking/OR-ing. Ideal to combine old and new systems for site upgradation, saving costs of battery replacement and easy maintenance without disconnecting the load.



Very low voltage drop Only 200mV @ 200A.

#### **Ultimate reliability**

The diode is equipped with its' own cooling. No active cooling is required reducing the amount of components and connections.

### **Current measurement**

The diode is equipped with current measurement for monitoring the incoming or outgoing current. When connected to the  $\Sigma$ -Ahr PWM/MPPT charge controller full system monitoring is achieved.

### In-field diagnostics

With a push button the main function of the diode can be tested in the field. LED's indicate the diode's operational status.





## Σ-Ahr Smart Diode

Electrical specifications	
Supply voltage	19 - 75 Vdc
Continuous forward current	200 Adc
Maximum forward current	250 Adc @ 60 sec.
Forward voltage @ 200 A	200 mVdc
Max. reverse voltage	80 Vdc

Monitoring	
Current measurement range	0 - 200 Adc
Current measurement output	0 - 100 mVdc
Accuracy	+/- 3%
LED indication	Operational, diode failure

General specifications	
Operating temperature	-20°C to +85°C
Storage temperature	-30°C to +85°C
Mounting	Indoor
Fixation	Din rail 35 mm
Digital alarm output	1x open drain
Max. power wire size	70 mm²
Max. control wire size	2.5 mm <sup>2</sup>
Approvals	CE
Standards	IEC 61000-6-2 IEC 61000-6-4

Dimensions and weight	
Dimensions L x W x H	143 x 76 x 85 mm
Weight	0.29 kg