



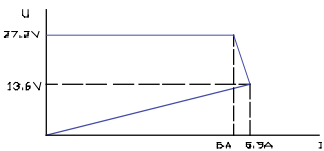
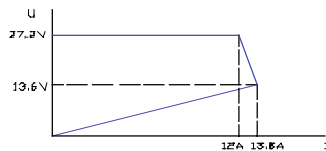
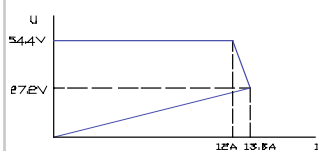
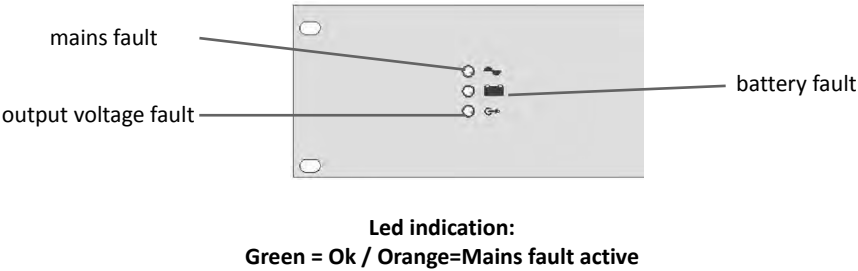


	SON 24V 6A MS40 RACK	SON 24V 12A MS150 RACK	SON 48V 12A MS150 RACK
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> Standard-based specifications			
Safety	EN 54-4 / EN 12101-10 classe A		
EMC - Immunity	EN 62368-1		
EMC - Emission	EN 50130-4 / EN 61000-6-1 / EN 61000-6-2		
Trade	EN 61000-3-2 / EN 61000-6-3 / EN 55032 B class		
Environment	This product range meets the environmental requirements of ISO 14001, RoHS and WEEE standards.    		
> N°CPR (CE)	1116-CPR-112	1116-CPR-089	1116-CPR-088
> Environmental specifications			
Humidity	<b>During storage:</b> relative humidity 10% to 95% (non-condensing) <b>In operation:</b> relative humidity 20% to 95% (non-condensing).		
Storage temperature	-25 to +85°C		
Working temperature	-5 to + 45°C		
Altitude	Above 2,000 m, the temperature decreases by 5% every 1,000 m		
Working life	200,000h with external ambient temperature of 25°C, nominal mains voltage, 48h full charging per year and for the rest of the time: 25% of load		
> Ratings			
Maximum current for all outputs	40 A	150 A	150 A
Number of amplifier outputs	2	6	6
Maximum power per amplifier output	20 A	40 A	
Number of controller outputs	3		
Maximum power per controller output	5 A		

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<b>&gt; Mains</b>			
Mains voltage	198 to 264 V AC		
Frequency	45 to 65 Hz		
Power at full load	190 W	380 W	760 W
Efficiency at full load	84%	87%	91%
Efficiency at 20% of load	74%	82%	86%
Neutral and earthing systems	TT, TN, IT		
Class	Class I		
<b>&gt; Output</b>			
Floating voltage ( $U_n$ ) set at half load and 25°C	27.2 V DC +/-0.5%		54.4 V DC +/-0.5%
Nominal output rectifier current	6 A	12 A	
Current limitation - short circuit current			
Peak to peak HF residual voltage (20 MHz-50 Ω)	< 4% of floating voltage		
RMS LF residual voltage	< 0.2% of floating voltage		
Static and dynamic regulation characteristics	< 5% of floating for mains voltage and output load (from 10 to 90%)		
<b>&gt; Battery</b>			
Cut-off threshold	21.6 V +/- 3%		43.2 V +/- 3%
Internal impedance threshold of the battery fault	50 mΩ +/-10%	- 24 mΩ +/-10% if jumper in '50' position - 16 mΩ +/-10% if jumper in '75' position	- 48 mΩ +/-10% if jumper in '50' position - 32 mΩ +/-10% if jumper in '75' position
Maximum current for all outputs drawn from the battery	40 A	* - 100 A if jumper in '50' position - 150 A if jumper in '75' position	
Minimum battery capacity	24 Ah	*65 Ah if jumper is on '50' position 86 Ah if jumper is on '75' position	
Maximum battery capacity	110 Ah	225 Ah	
Battery voltage compensation	A system for the compensation of the battery output voltage maintains the charging characteristics within the battery manufacturer's specifications over the entire operating temperature range. If the sensor is broken or disconnected or has short circuit, the battery voltage is no longer compensated.		
Internal rectifier consumption	140 mA	430 mA	290 mA
<b>&gt; Connections</b>			
Mains	2.5 mm <sup>2</sup> plug-in (IEC320) and lockable		
Main outputs	16 mm <sup>2</sup> plug-in		
Auxiliary outputs	2.5 mm <sup>2</sup> plug-in		
Battery output	16 mm <sup>2</sup> plug-in	50 mm <sup>2</sup> plug-in	
Alarm outputs	1.5 mm <sup>2</sup> plug-in		
Temperature sensor	1.5 mm <sup>2</sup> plug-in		

\* 2 current configurations are available depending on jumper position.

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<b>&gt; Protections</b>			
Against unintentional battery reverse	<ul style="list-style-type: none"> <li>- <b>At start-up:</b> the battery is not connected</li> <li>- <b>During operation:</b> the fuse F8 (5 x 20, rated:6.3 A, type T) on the power and control board blown</li> </ul>	<ul style="list-style-type: none"> <li>- <b>At start-up:</b> the battery is not connected</li> <li>- <b>During operation:</b> the fuse F8 (5 x 20, rated:12.5A, type T) on the power and control board blown</li> </ul>	
Against battery wiring error	<ul style="list-style-type: none"> <li>- <b>If battery voltage</b> &gt; 30 V +/-3%, the battery is not connected</li> <li>- <b>If battery voltage</b> &lt; 14 V +/-3%, the battery is not connected</li> </ul>		<ul style="list-style-type: none"> <li>- <b>If battery voltage</b> &gt; 60 V +/-3%, the battery is not connected</li> <li>- <b>If battery voltage</b> &lt; 40 V +/-3%, the battery is not connected</li> </ul>
Against output over-voltage	<ul style="list-style-type: none"> <li>- <b>Regulation problem:</b> by switching off the power supply and restarting cyclically. The threshold is 28.8 V +/-3%</li> <li>- <b>External:</b> by transient voltage suppressor</li> </ul>		<ul style="list-style-type: none"> <li>- <b>Regulation problem:</b> by switching off the power supply and restarting cyclically. The threshold is 57.6 V +/-3%</li> <li>- <b>External:</b> by transient voltage suppressor</li> </ul>
<b>&gt; Fonctionnal characteristics</b>			
Alarms and signalisations	 <p style="text-align: center;"><b>Led indication:</b> Green = Ok / Orange=Mains fault active</p>		
Mains	<p><b>Fault if:</b></p> <ul style="list-style-type: none"> <li>- mains voltage threshold &lt;185 V +/-5% as long as the charger has not started, &lt;165 V +/-5% when the charger has started</li> <li>- no primary fuse or fuse has blown</li> <li>- power supply is broken</li> <li>- internal temperature is too high</li> </ul>		
Battery	<p><b>Fault if:</b></p> <ul style="list-style-type: none"> <li>- no battery</li> <li>- high impedance on battery and its associated circuit</li> <li>- battery voltage &lt; 23.5 V +/-3% mains present</li> </ul>	<p><b>Fault if:</b></p> <ul style="list-style-type: none"> <li>- no battery</li> <li>- high impedance on battery and its associated circuit</li> <li>- battery voltage &lt; 47 V +/-3% mains present</li> </ul>	
	<p><b>Battery fault monitoring</b></p> <ul style="list-style-type: none"> <li>- Detection of the presence/absence of the battery: 1 test every 30 seconds during the first 20 min and every 15 min after (in normal operation). As soon as a fault detection, the test is repeated every 30 seconds until no fault.</li> <li>- Measurement of the impedance of the battery and its associated circuit: 1 test every 4 hours the mains is present on the power supply and if the power supply has a current &lt; rectifier current.</li> </ul>		
Output	<p><b>Fault:</b> when one of the auxiliary or main outputs fails</p>		
Alarm reports	<p>Each alarm can be transmitted by dry contacts free of potential (C-NO-NC) allowing 1 A @ 24 V DC, 0.5 A @ 120 V AC</p>		
<b>&gt; Mechanical characteristics</b>			
Dimensions	<p>Rack 19" (MS40): W 483 mm x H 88 mm (2U) x D 355 mm (with connectors) / 344 mm (without connectors)            Rack 19" (MS150): W 483 mm x H 88 mm (2HE) x D 398 mm (with connectors) / 344 mm (without connectors)</p>		
Weight	3.1 kg	5.4 kg	5.9 kg
IP (front side)	IP 30		

SLAT can change specifications on his products without prior notice.