

# ZGR TPS 120/200 NG

## COMPACT SWITCHING CHARGER – RECTIFIER SMART GRID

ZGR TPS 120/200 NG have compact design in high frequency technology

ZGR TPS 120/200 NG equipments are 48 V battery rectifiers-chargers, capable of managing lead or lithium batteries of up to 18 Ah of capacity for industrial applications, remote controls, remote control for transformer centres and applications a power supply secure tele-controlled in needed.

The total powers that these equipments can supply are 120 W and 200 W respectively. They can also supply (without battery) 10 seconds lasting peaks of 180 W and 400 W, depending on the model. The galvanic isolation between input and remaining circuits is 1 0kV. Unlike other equipments, ZGR TPS 120/200 NG range includes a system to test the state of health of the battery. This battery test can be done automatically or manually from outside.

ZGR TPS 120/200 NG has an Ethernet connection through which locally or remotely, it can be monitorized, make changes over the settings, even update the equipments firmware. It also supports SNMP to incorporate in the supervision systems.



### Applications



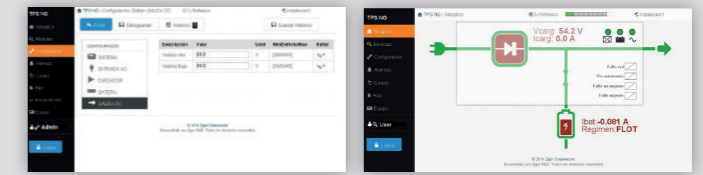
### Characteristics

- Compact design
- High efficiency
- High frequency switching
- Easy installation and maintenance
- Battery management
  - Automatic and periodic battery test
  - Autonomous Energy Management
  - Communication with battery BMS (only lithium version)
- Control and signalling
  - Integrated communications with web services or SNMP for configuration and reading of equipment measurements
  - Web interface for displaying variables and status, setting parameters and alarms, viewing event log, sending orders and updating firmware remotely
  - Dry contact alarms

### Connectivity and Monitoring

Communication gateway integrated: It enables the communication via Web Server (http). It includes advanced authentication (LDAP), parameterization, (XML) and time synchronization (NTP) features.

The Web Server allows the user to access the following data: status, measurements, configuration, alarms, control, network, equipment, etc.



### TECHNICAL SPECIFICATIONS

Model	ZGR TPS 120 NG	ZGR TPS 200 NG
<b>AC INPUT ELECTRICAL CHARACTERISTICS</b>		
Power supply voltage	230 Vac -20% /+15% <sup>(1)</sup>	
Nominal frequency	50 – 60 Hz	
Power factor	> 0.6	
<b>OUTPUT ELECTRICAL CHARACTERISTICS</b>		
Output voltage / Battery in fast charge mode (lead version)	59V ± 0.5 %	Configurable temperature compensation
Output voltage/ Battery in flotation mode (lead version)	54.24 V ± 0.5 %	
Output voltage (lithium version)	55.6V	
Voltage range	39 – 60 V	
Ripple	< 50 mVpp	
Maximum total permanent current	3A	5.2 A
Maximum current during 10 mins	4.6A	10.3 A
Permanent total power	120W	200 W
Total power during 10 mins	180W	400 W
Efficiency	> 75 %	
Battery charge current limitation <sup>(2)</sup>	0.25 A	1.3A
<b>COMMUNICATIONS</b>		
Monitoring	Web interface	
Communications	Ethernet, SNMP, MODBUS TCP	
<b>PROTECTIONS</b>		
Battery	Temperature compensation (configurable), electronic limitation of the charging current, protection against deep discharge of the battery by means of a relay in series	
AC input	Overcurrent protection by input fuse	
DC output	Varistor surge protection, electronic limitation of the charger current	
Dielectric rigidity Input - Other circuits	10 kVac 50Hz 1 min	
Dielectric rigidity Ground - Output	2 kVac 50Hz 1 min	
<b>MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS</b>		
Cooling	Natural convection	
Range ambient temperature	-10°C – +60°C	
Degree of environmental protection	IP20	
Operating altitude	< 1000 m without power loss	
Relative humidity	5 to 90 % without condensation	
Dimensions (W x D x H)	250 x 115 x 130mm (rear fixing 280 x 115)	
Approx. Weight	5kg	
<b>STANDARDS</b>		
Marks	CE	
General directives	2006/95/CE (UNE-EN 61000-6-2 UNE-EN 61000-6-4) 2006/95/CE (EN 50178)	

<sup>(1)</sup> Optional other input voltages

<sup>(2)</sup> Parameterizable according to the characteristics of the battery up to the maximum current of the equipment

These specifications may change without notice

### Connections

