

Skylla TG Charger 24/48V



Skylla TG 24 50



Skylla TG 24 50 3 phase



Skylla TG 24 100

Perfect chargers for any type of battery

Charge voltage can be precisely adjusted to suit any sealed or unsealed battery system.

In particular, sealed maintenance free batteries must be charged correctly in order to ensure a long service life. Overvoltage will result in excessive gassing and venting of a sealed battery. The battery will dry out and fail.

Suitable for AC and DC supply (AC-DC and DC-DC operation)

Except for the 3-phase input models, the chargers also accept a DC supply.

Controlled charging

Every TG Charger has a microprocessor, which accurately controls the charging in three steps. The charging process takes place in accordance with the IUoUo characteristic and charges more rapidly than other processes.

Use of TG Chargers as a power supply

As a result of the perfectly stabilized output voltage, a TG Charger can be used as a power supply if batteries or large buffer capacitors are not available.

Two outputs to charge 2 battery banks (24V models only)

The TG Chargers feature 2 isolated outputs. The second output, limited to approximately 4A and with a slightly lower output voltage, is intended to top up a starter battery.

To increase battery life: temperature compensation

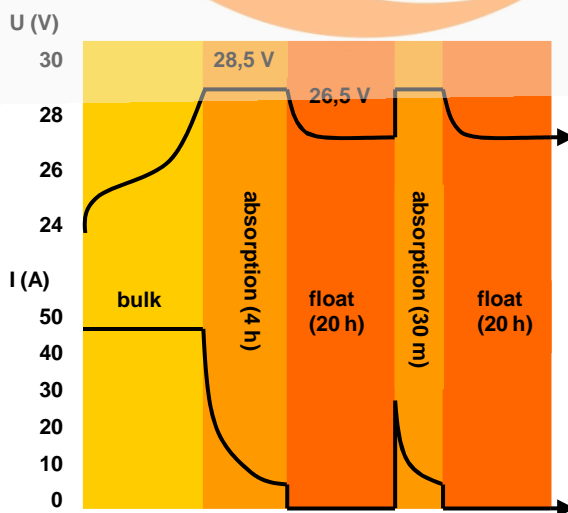
Every Skylla TG Charger comes with a battery temperature sensor. When connected, charge voltage will automatically decrease with increasing battery temperature. This feature is especially recommended for sealed batteries which otherwise might be overcharged and dry out due to venting.

Battery voltage sense

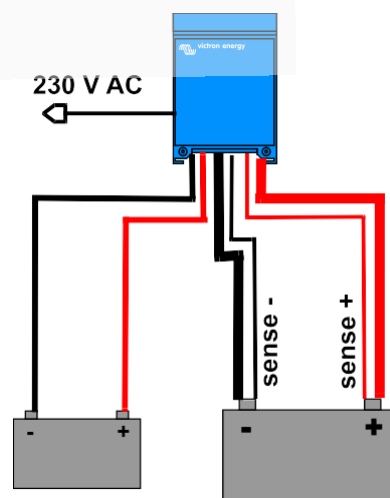
In order to compensate for voltage loss due to cable resistance, TG Chargers are provided with a voltage sense facility so that the battery always receives the correct charge voltage.

Learn more about batteries and battery charging

To learn more about batteries and charging batteries, please refer to our book 'Energy Unlimited' (available free of charge from Victron Energy and downloadable from www.victronenergy.com).



Charge curve



Application example

SDTG2400801								STG024100300		SDTG4800501	
SDTG2400301		STG024050300		SDTG2401001		SDTG4800251					
Skylla	SDTG2400501	24/30 TG 24/50 TG	24/50 TG 3 phase	24/80 TG	24/100 TG	24/100 TG 3 phase	48/25 TG	48/50 TG			
Input voltage (V AC)		120/230	3 x 400	230	230	3 x 400	230	230			
Input voltage range (V AC)		95-264	320-450	185-264	185-264	320-450	185-264	185-264			
Input voltage range (V DC)		180-400	n. a.	180-400	180-400	n. a.	180-400	180-400			
Frequency (Hz)		45-65									
Power factor		1									
Charge voltage 'absorption' (V DC)		28,5	28,5	28,5	28,5	28,5	57	57			
Charge voltage 'float' (V DC)		26,5	26,5	26,5	26,5	26,5	53	53			
Charge current house batt. (A) (2)		30 / 50	50	80	100	100	25	50			
Charge current starter batt. (A)		4	4	4	4	4	n. a.	n. a.			
Charge characteristic		IUoUo (three step)									
Battery capacity (Ah)		150-500	250-500	400-800	500-1000	500-1000	125-250	250-500			
Temperature sensor		√									
Can be used as power supply		√									
Remote alarm		Potential free contacts 60V / 1A (1x NO and 1x NC)									
Forced cooling		√									
Protection (1)		a,b,c,d									
Operating temp. range		-40 to +50 °C (-40 - 122 °F)									
Humidity (non-condensing)		max 95%									
ENCLOSURE											
Material & Colour		aluminium (blue RAL 5012)									
Battery-connection		M8 studs									
230 V AC-connection		screw-clamp 2,5 mm² (AWG 6)									
Protection category		IP 21									
Weight kg (lbs)		5,5 (12.1)	13 (28)	10 (22)	10 (22)	23 (48)	5,5 (12.1)	10 (12.1)			
Dimensions hxxwxd in mm (hxxwxd in inches)		365 x 250 x 147 (14.4x9.9x5.8)	365 x 250 x 257 (14.4x9.9x10.1)	365 x 250 x 257 (14.4x9.9x10.1)	365 x 250 x 257 (14.4x9.9x10.1)	515 x 260 x 265 (20x10.2x10.4)	365 x 250 x 147 (14.4x9.9x5.8)	365 x 250 x 257 (14.4x9.9x10.1)			
STANDARDS											
Safety		EN 60335-1, EN 60335-2-29									
Emission		EN 55014-1, EN 61000-3-2									
Immunity		EN 55014-2, EN 61000-3-3									
1) Protection											
a. Output short circuit											
b. Battery reverse polarity detection											
2) Up to 40 °C (100 °F) ambient											
c. Battery voltage too high											
d. Temperature too high											



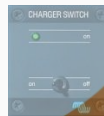
BMV-700 Battery Monitor

The BMV-700 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms, like Peukert's formula, to exactly determine the state of charge of the battery. The BMV-700 selectively displays battery voltage, current, consumed Ah or time to go.



Skylla Control

The Skylla Control allows you to alter the charge current and see the system status. Altering the charge current is useful if the shore power fuse is limited: the AC current drawn by the battery charger can be controlled by limiting the maximum output current, thereby preventing the shore power fuse from blowing.



Charger Switch

A remote on-off switch



Battery Alarm

An excessively high or low battery voltage is indicated by an audible and visual alarm.