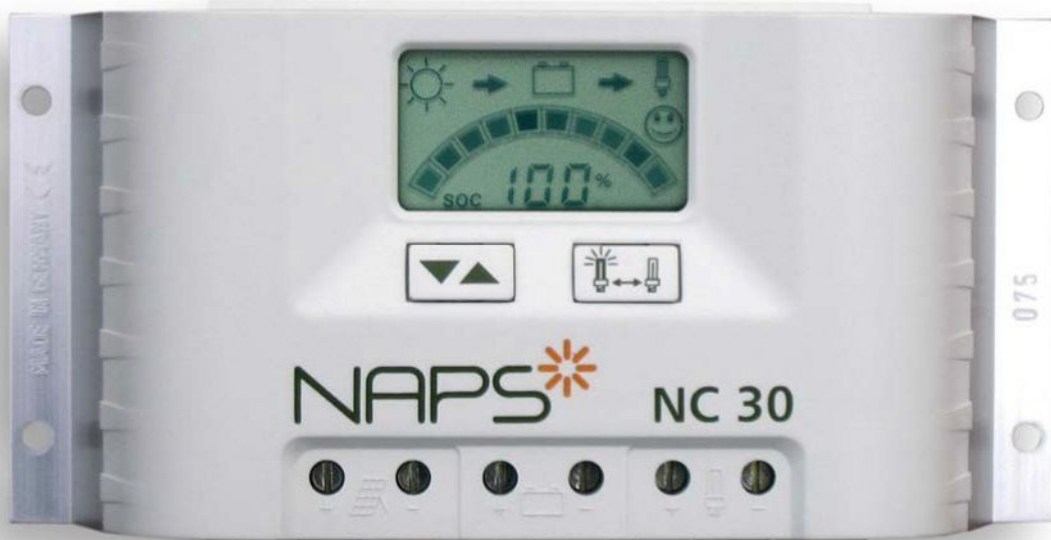


Naps NC 10 / NC15 / NC 30



Features

- For either 10, 15 or 30A current (NC10/15/NC30)
- Automatic selection of system voltage (12/24V)
- Electronic fuses and protection
- Charging procedure based on either battery state of charge or on battery voltage
- Four phase charging
- PWM (pulse width modulation) charging
- Temperature compensation of charging voltage
- Compensation of voltage loss in cables
- Coated circuit board to protect from moisture
- Battery type setting (gel/liquid)
- Three years warranty

Display

- Clear symbolic display
- Battery state of charge (%)
- Battery voltage (V)
- Module current (A)
- Charging current (A)
- Load current (A)
- Battery recharging meter (Ah)
- Battery discharging meter (Ah)
- Deep discharge warning



Technical data

Electrical data

• System voltage	12 V or 24 V; automatic selection
• Bat. voltage range for 12 V	6,9 V – 17,2 V
• Bat. voltage range for 24 V	17,3 V – 43,0 V
• Operating temperature range	-10 °C - +50 °C
• Storage temperature range	-20 °C - +80 °C
• Current consumption	12 V: ca. 12,5 mA, 24 V: ca. 15,8 mA
• PWM-frequency	30 Hz
• Maximum input voltage	45 V
• Minimum battery voltage	6,9 V

Current ratings

• Max continuous panel current	10A (NC10), 15 A (NC 15), 30 A (NC 30)
• Max continuous load current	10A (NC10), 15 A (NC 15), 30 A (NC 30)

Charge voltage settings

	Gel battery (GEL)	Flooded (open) battery (Li)
• Float charge voltage	14,1 V / 28,2 V	13,9 V / 27,8 V
• Boost charging, 2 hours	14,4 V / 28,8 V	14,4 V / 28,8 V
• Equalization charging, 2 hours		14,7 V / 29,4 V +/-
• Temperature compensation	4 mV / °K / cell (built-in sensor)	

Activation of charge modes

	SOC-control	Voltage control
• Float charge regime	SOC: $\geq 70\%$	$\geq 12,7\text{ V}$ or $\geq 25,4\text{ V}$
• Boost charge	SOC: $40\% - 69\%$	$11,7-12,4\text{ V}$ or $23,4-24,8\text{ V}$
• Equalization charge 30 day equalization charge	SOC: $< 40\%$ If boost or equalization charge has not been activated during past 30 days.	$< 11,7\text{ V}$ or $23,4\text{ V}$

Low voltage disconnect

	SOC-control	Voltage control
• Warning	SOC $< 40\%$	$< 11,7\text{ V} / 23,4\text{ V}$
• Disconnect	SOC $< 30\%$	$< 11,1\text{ V} / 22,2\text{ V}$
• Automatic reconnect	SOC $> 50\%$	$> 12,6\text{ V} / 25,2\text{ V}$

Overtemperature protection

- Load disconnect $> 85\text{ °C}$
- Load reconnect $< 75\text{ °C}$

Mechanical data

• Protection class	IP 22
• Installation	Vertical
• Weight	350 g
• Material	Recycleable plastic
• Dimensions (W x H x D)	187 mm x 96 mm x 44 mm
• Connectors (stranded/solid)	16 mm ² / 25 mm ²

Guarantee Solar Charge Controller 10A/ 15A/ 30A

The manufacturer assumes the following guarantee obligations towards the end user:

The manufacturer will remove all manufacturing and material faults that appear in the regulator and affect the correct functioning of the device during the guarantee period. Normal wear does not constitute a fault. The warranty is void if, after the end user completes the purchase contract, the fault is attributable to the end user or a third party, is caused in particular by improper installation or commissioning, improper or negligent handling, excessive wear, mechanical damage, inappropriate resources, faulty construction work, inappropriate building grounds or improper operation or use. The warranty is only valid if after discovery, the fault is immediately claimed to your specialized dealer. The claim is to be sent by the specialized dealer to the manufacturer. A copy of the purchase contract must be enclosed.

An exact fault description is required for a rapid settlement. The warranty expires 24 months after the end user has completed the purchase contract, unless the manufacturer has expressly agreed to an extension period in writing.

The manufacturer's warranty based on the purchase contract with the end user is not affected by these present guarantee obligations. The manufacturer is entitled to carry out the warranty by repairing the fault or delivering a replacement. This does not include exchange, shipping or reinstallation costs. If repairs or replacement delivery are/is not possible or not carried out within an appropriate time despite a reasonable grace period determined by the customer, the decrease in value caused by the fault will be replaced or provided that is in the user's interests not sufficient, the contract will be changed.

Further claims against the manufacturer based on this guarantee obligation, in particular customer claims for damages due to lost profit, compensation for use and direct damages are excluded, provided claims must not be made according to law.

The Steca GmbH is an ISO 9001: 2000 certified company.



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