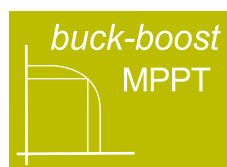


GSR 36/48V Charge controller

IN DETAIL

- MPPT step-up recharge
- Large tension range on panel entrance $V_p = 2.0V - V_{batt}$
- Battery tension 36V / 48V with dipswitch sortable
- For Pb and Lithium ions batteries with dipswitch sortable
- Temperature compensated Charge voltage
- Over temperature protection
- Protection for battery polarity inversion
- IP 20 plastic case in ABS
- Load terminal can be programmed for lighting systems



For more details we invite you to visit our website: www.giocosolutions.com and follow the installation procedure in the products form, available to download.



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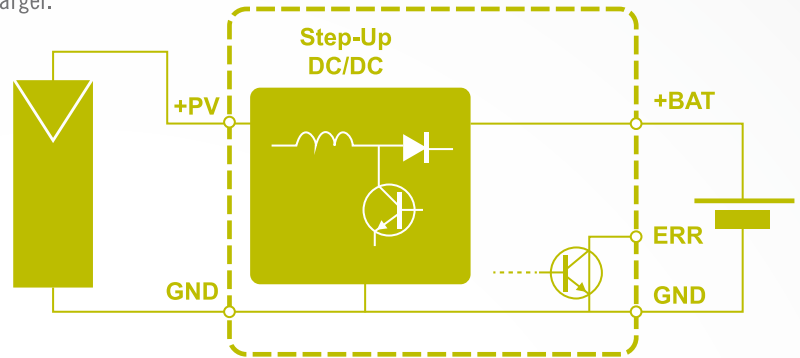
INFO@GIOCOSOLUTIONS.COM
GIOCOSOLUTIONS.COM

CHARACTERIZATION

GSR 36/48 is a charge controller with MPPT technology STEP UP. The charging circuit of the battery does work the flexible photovoltaic modules Giocosolutions in the maximum power point in a voltage range that starts from 2.0V up to the battery voltage due to the innovative circuit STEP UP Giocosolutions.

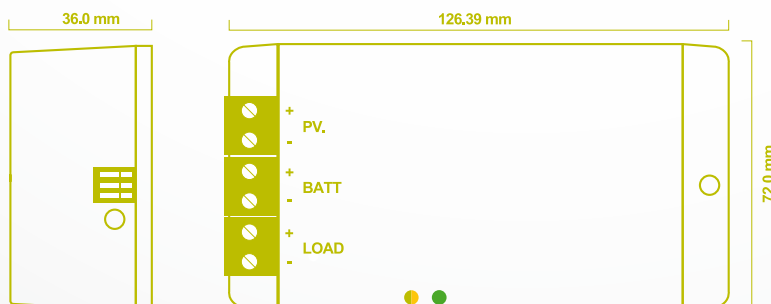
The battery can be both 36V and 48V, the controller is able to automatically riconoscre the battery voltage. The GSR 36/48 can be configured to charge lead-acid batteries (charge voltage temperature compensation) and lithium-ion battery (eg LiFePo4).

Two LEDs on board the GSR 36/48 indicate the operational status of the system, a green LED indicates the charging current delivered to the battery, while an amber LED indicates the condition of the battery charger.



ELECTRICAL CHARACTERISTICS

		NOMINAL TENSION BATTERY 36V			NOMINAL TENSION BATTERY 48V		
		Min	Tip	Max	Min	Tip	Max
BATTERY VOLTAGE	VBATT	33V	-	46V	33V	-	60V
OPEN-CIRCUIT VOLTAGE OF PANEL	VPAN	2.0V	-	40V	2.0V	-	55V
PANEL CURRENT	IPAN	-	-	18.0A	-	-	18.0A
MAXIMUM POWER OF PANEL	PMAX	-	-	190W	-	-	270W
MAXIMUM CHARGE CURRENT	ICH-MAX	-	-	4.5A	-	-	4.5A
END-CHARGE VOLTAGE AT 25 ° C PROGRAM PB SW2 OFF (DEFAULT)	VCH_PB	-	43.2V	-	-	57.6V	-
COMPENSATION VCH FUNCTION OF THE TEMPERATURE OF THE BATTERY (TBATT)	VTADJ	-	-72MV/°C	-	-	-96MV/°C	-
END-CHARGE VOLTAGE AT 25 ° C PROGRAM LITHIUM SW2 ON	VCH_LI	-	43.2V	-	-	57.6V	-
LOW BATTERY VOLTAGE WARNING	VLB_PB	-	33.3V	-	-	44.4V	-
VOLTAGE OUTPUT SIGNAL LOW BATTERY	VOUT_LB_PB	-	VCH_PB-1.2V	-	-	VCH_PB-1.6V	-
SELF CONSUMPTION	VLB-LI	-	37.5V	-	-	50.0V	-
OPERATING TEMPERATURE	VOUT_LB_LI	-	VCH_LI-1.2 V	-	-	VCH_LI-1.2V	-
POWER DISSIPATION	ILOAD	-	-	5A	-	-	5A
SECTION TERMINALS	VLOAD	-	VBATT	-	-	VBATT	-
DEGREE OF PROTECTION	ISLEEP	-	-	10MA	-	-	10MA
BODY MATERIAL	TAMB	-10°C	-	50°C	-10°C	-	50°C
WEIGHT	PDISS	-	-	2 W	-	-	2 W
BATTERY VOLTAGE	η	97%	-	-	97%	-	-
OPEN-CIRCUIT VOLTAGE OF PANEL		1MM ²		2.5MM	1MM		2.5MM
PANEL CURRENT			IP20		IP20		
MAXIMUM POWER OF PANEL				ABS			
MAXIMUM CHARGE CURRENT		-	185 G	-	-	185 G	-



Installation manual



GIOCO SOLUTIONS®

VIA AVOGADRO 19
AVIGLIANA 10051
TORINO, ITALY

INFO@GIICOSOLUTIONS.COM
GIICOSOLUTIONS.COM