



ELECDAN
Converter

600W solar regulator
boost, MPPT, Solar Direct Drive

V_{out} possible : 40 to 56V / V_{in} : 33 to 52V



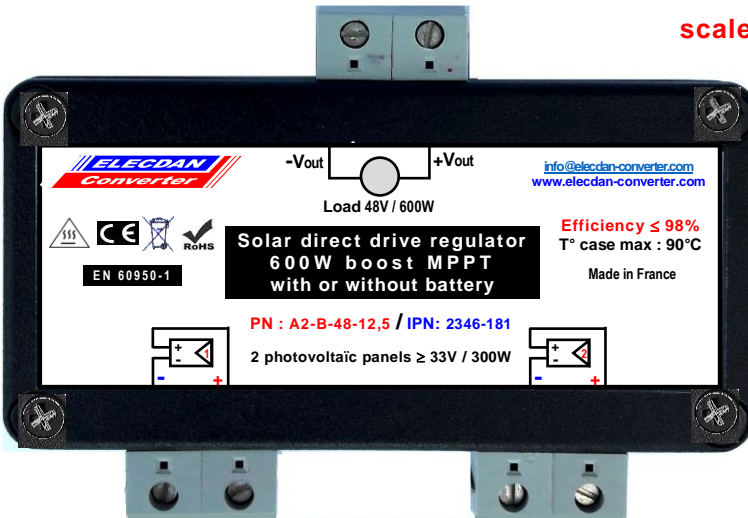
Made in France





100
A2
26

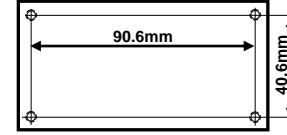
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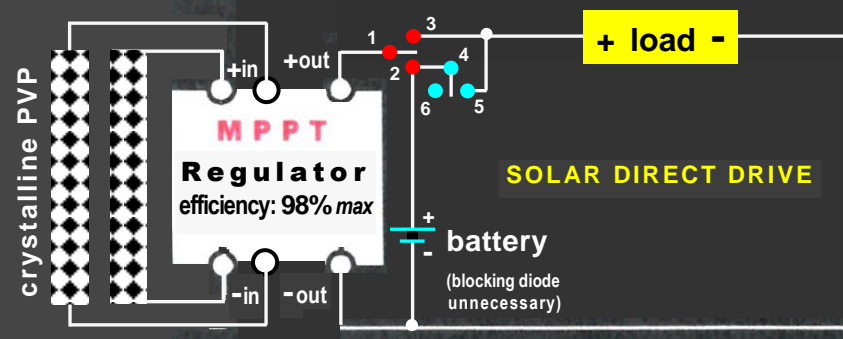
scale: 1

Case: molded aluminum
 > 100 x 50 x thickness 26mm
 > weight: 270g (without heatsink)

Terminal blocks:
 Input and output: 8 mm²
 Bottom mounting



SKU: case, type, V _{out} (or V _{out} range), I _{out} , option					Unit price (€)
case	type	V _{out} (V)	V _{out} range (V)	I _{out} (A)	
A2	B	48	40 / 56	12.5	
				12.5 / 10.7	
		56		10.7	
Some options and their references				heatsink: D4 or D5 on / off : ON wired outputs: F	
Examples of references				A2-B-48-12,5-D4 A2-B-40/56-12.5/10.7-D5	



crystalline PVP

MPPT Regulator
efficiency: 98% max

SOLAR DIRECT DRIVE

battery (blocking diode unnecessary)

+ load -

In the absence of a battery, the torque and speed of a motor (e.g. helical pump) adapt perfectly to variations in light levels, morning, noon and evening. What's more, with a response time of < 0.1 seconds, our MPPT regulator takes the strain off mechanical transmissions: suddenly connected to a loaded motor, it supplies it with a voltage that is immediately lowered, then restored linearly in a matter of seconds.

link	link	receiver supply	battery supply
1 & 3	4 & 6	yes	no
1 & 2	4 & 6	no	yes
1 & 3	4 & 5	yes	yes

This 600W / 48V regulator is the boost version of our MPPT SDD range, buck or buck-boost, with power increasing, in steps, from 150W up to $\geq 2.4\text{kW}$ / 100V. Controlled by two innovative analog MPPT (sheet "5116" ①), it benefits from extreme reliability and miniaturization (130 cm³, excluding cooling), as well as 98% max efficiency and IP67 sealing. These qualities, and the choice of two suitable photovoltaic panel, facilitate a wide range of Solar Direct Drive applications: refrigerator, fan, helicoidal pump, tricycle ... and even, possibly, direct installation under the aluminum edge of the photovoltaic panel.

Input voltage V _{in} of the MPPT regulator and V _{out}		PANEL			Some possibilities with the regulator (600W max)	
V _{in}	V _{out}	cellules	V _p (V)	V _{out} (V)	I _{out} max (A)	efficiency
33	48	60	33	48	12.5	0.98
33	40	60	33	40	12.5	0.97
33	56	60	33	56	10.7	0.98

Thermal characteristics:

- > case thermal resistance (R_{th}): 5°C / W
- > extreme case temperatures: -30°C to +90°C
- > cooling: direct on wall or, optionally, in heatsink D4 or D6, R_{th} = 2°C and 1°C / W

Options: custom output voltages; V_{out} adjustment via external resistor; outputs on molded wires

Standards and special features: EN / UL / CSA / 60950-1 / RoHS; MTBF: > 10⁶ hours, base at 50°C (with thermal grease)

Specialized since 1974 in electrical energy conversion, analog calculation and signal processing, over the past 5 years we have also been studying and testing our innovative MPPT (breakthrough technique and technology, new patent). We have also expanded our knowledge of green, autonomous or complementary energies. So please do not hesitate to ask us for advice if our technical data sheets are not sufficiently didactic; **Note:** we are also involved in the development of ultra-light photovoltaic panels, with the option of an inbuilt MPPT controller, 150 or 300W.

For initial information, see data sheets 5116 ①, 5088 ②, 6154 ③, 6013 ④, 6155 ⑤ & 6157 ⑥ Reproduction authorized if source is acknowledged: "elecдан-converter.com"