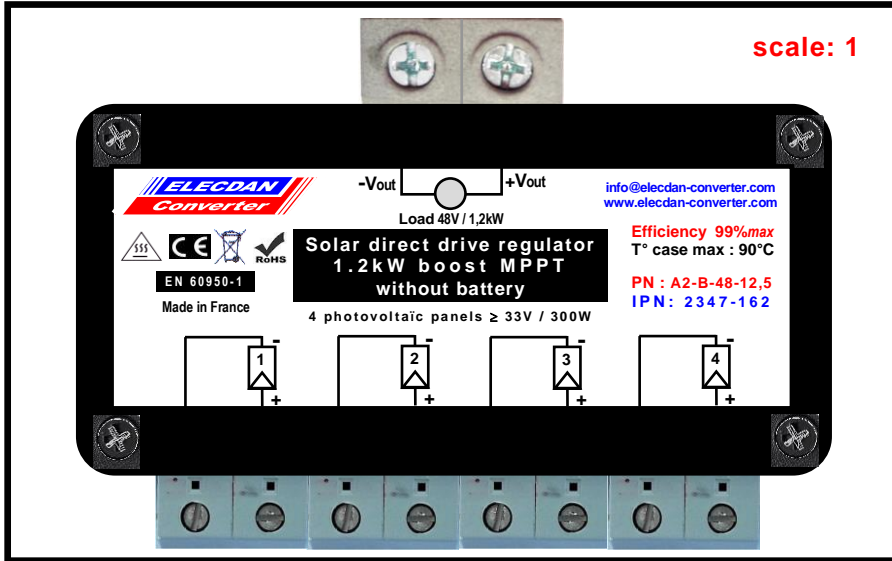


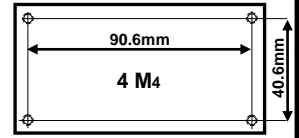
Vout possible: 40 to 56V, with 33V / 300W photovoltaic panels



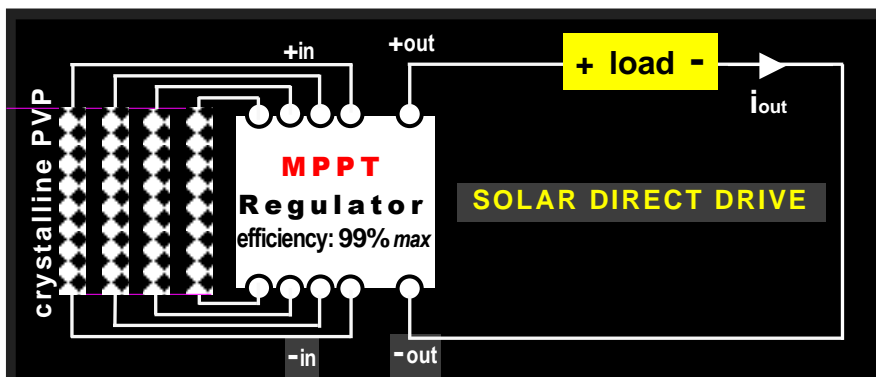
Case: molded aluminum
 > 100 x 50 x thickness 26
 > weight: 290g (without heatsink)

Terminal blocks:
 > screw inputs (8mm² wires)
 > output: screw + clamp (30mm²)

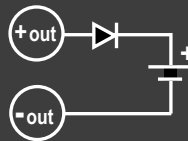
Bottom mounting (4 M4)



SKU: case, type, Vout (or Vout range), İout, option					PUHT (€)
case	type	Vout (V)	Vout range (V)	İout (A)	
A2	B	48	40 / 56	25	
		56		21.4	
		Some options and their references		heatsink: D5 on / off : ON wired outputs: F	
Examples of references		A2-B-48-25 A2-B-40/56-28/21-D5			



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.



If, however, the addition of a battery is desired, please insert two blocking Schottky diode, such as VS-MBR6045WT-N3. For a 48V battery, set Vout ≈ 55.2V.

This 1,2kW / 48V regulator is the boost version of our MPPT SDD range, buck or buck-boost, with power increasing, in steps from 150W up to ≥ 2.4kW / 100V. Controlled by two innovative analog MPPT (sheet "5116" ①), it benefits from extreme reliability and miniaturization (130 cm³, excluding cooling), as well as 99% max efficiency and IP67 sealing. These qualities, and the choice of two suitable photovoltaic panel, facilitate a wide range of Solar Direct Drive applications: air conditioning, ventilation, boating, quadricycle, inverter 1,2kW (48Vdc → 230V~) and even, possibly, direct installation under the aluminum edge of the photovoltaic panel.

Permissible input voltages Vin of the MPPT regulator: 33V to 52V
Vin is supplied by mono- or poly-crystalline cells (0.55V and 5W each), the number of which determines the voltage Vp and the power of the photovoltaic panel. The panel generally comprises 60 or 72 cells. Example: 1/ a 60-cell panel supplies 300W at 33V. 2/ lighted at 83%, a 72-cell panel would supply 300W
Power supplied by panel ≥ 1.1 (Vout regulator x İout)
Vout : either fixed 48V or 56V, either adjustable 40 to 56V

PANEL		Some possibilities with the regulator (1.2kW max)		
cells	Vp (V)	Vout (V)	İout max (A)	efficiency
60	33	40	28	0.98
60	33	48	25	0.99
60	33	56	21.4	0.99

Thermal characteristics:

- > case thermal resistance (Rth): 5°C / W
- > extreme case temperatures: -30°C to +90°C
- > cooling: direct on wall or, optionally, in heatsink D6, Rth = 1°C

Options: custom output voltages; Vout 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.