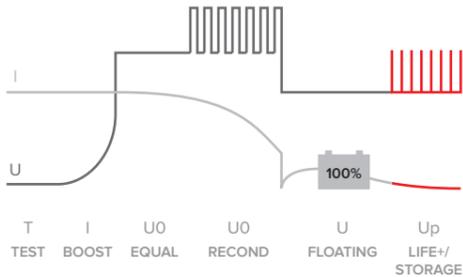


CHARGING CURVE UNIQUE ON THE MARKET



- 1 Test**
Analysis of the battery's status.
- 2 Boost charge**
Fast charge at maximum power
- 3 Equalisation**
Equalization of the charge to 100% on all the elements of the battery.
- 4 Recondition**
Battery stirring to prevent stratification. Electrolyte mixing of the battery to avoid all sulfation and stratification
- 5 100%**
Maintaining the charge at 100% (floating).
- 6 Life+/Storage**
Compensation of the natural self-discharge of the battery, with pulse charge for more battery life.

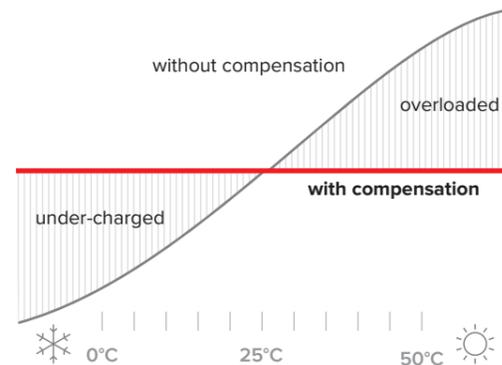
PERFECT CHARGE ADAPTED TO BATTERY'S TECHNOLOGY

Voltage thresholds

Gel battery	AGM battery	Flooded battery
Boost		
14,2 V	14,4 V	14,5 V
Absorption		
-	14,4 V	14,5 V
Leveling		
-	-	14,8 V
Floating		
13,9 V	13,9 V	13,9 V

Algoteck adjusts the levels according to the internal analysis of the battery and the ambient temperature.

PERFECT CHARGE ADAPTED TO AMBIENT TEMPERATURE



The chemical characteristics of the battery vary according to the ambient temperature. Thanks to its temperature sensor, UNIMPPT regulates all its voltage thresholds, compared to a reference temperature of 25°C of +/- 30mV per °C. Without regulation, the battery is either under-charged, limiting the electric autonomy, or overloaded, irreversibly degrading its life.

HIGH EFFICIENCY

Entry-level price range	UNIMPPT
Output at 20W	
95%	98%
Output at 50W	
90-95%	98%
Output at max. capacity	
< 90%	98%

UNIMPPT SOLAR Charge controller

A CONCENTRATE OF TECHNOLOGY



- Evolved MPPT Technology
- Tests, charges at 100%, avoids sulfation and stratification, maintains the charge and improves the battery life.
- Charges all batteries thanks to its regulation adapted to every type of battery.
- Regulates the voltage according to the ambient temperature, to avoid over- or under-charging.
- Protects against surges, overconsumption, short circuits, polarity reversals, low battery
- 100% made in France

The MPPT range is revolutionizing the charge controllers market.

Its ALGOTECK 6 charging curve, the only one of its kind on the market, tests your battery, recharges it a 100%, desulfates it, delaminates it, maintains its charge and improves its lifespan, while taking into consideration the technology and the ambient temperature of your battery to adjust its voltage levels according to the recommendations of the battery manufacturers.

With its MPPT technology (inverter solar charge controllers), UNIMPPT uses all the panel voltage by reconverting the surplus of panel/battery voltage, not used with a standard charge controller, in charge intensity for the battery.

Its optimized MPPT program, paired up with one of the fastest microprocessors on the market, searches in real-time (every 100ms), the maximum power point of the panel.

UNIMPPT guarantees up to 40% more energy in the winter and 15% more energy in the summer compared to a PWM charge controller, even under changing weather conditions.

Its unique and innovative design with wiring through partition walls enables a perfect and discreet integration into your home or the passenger compartment of your car.

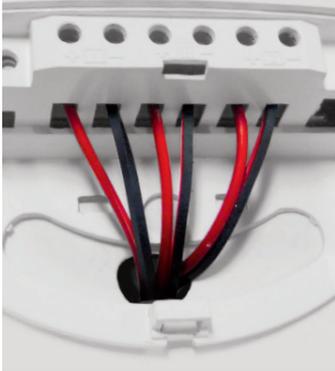
EASIER CABLING AND MOUNTING

UNIMPPT 30/10.12S, 60/15.24, 60/15.24S, 60/20.24S, 60/30.24S, 60/40.24 S, 100/60.24S



Wall mount

UNIMPPT 30/10.12S, 60/15.24, 60/15.24S, 60/20.24S



Wiring through a partition wall

UNIMPPT 30/10.12S, 60/15.24, 60/15.24S, 60/20.24S

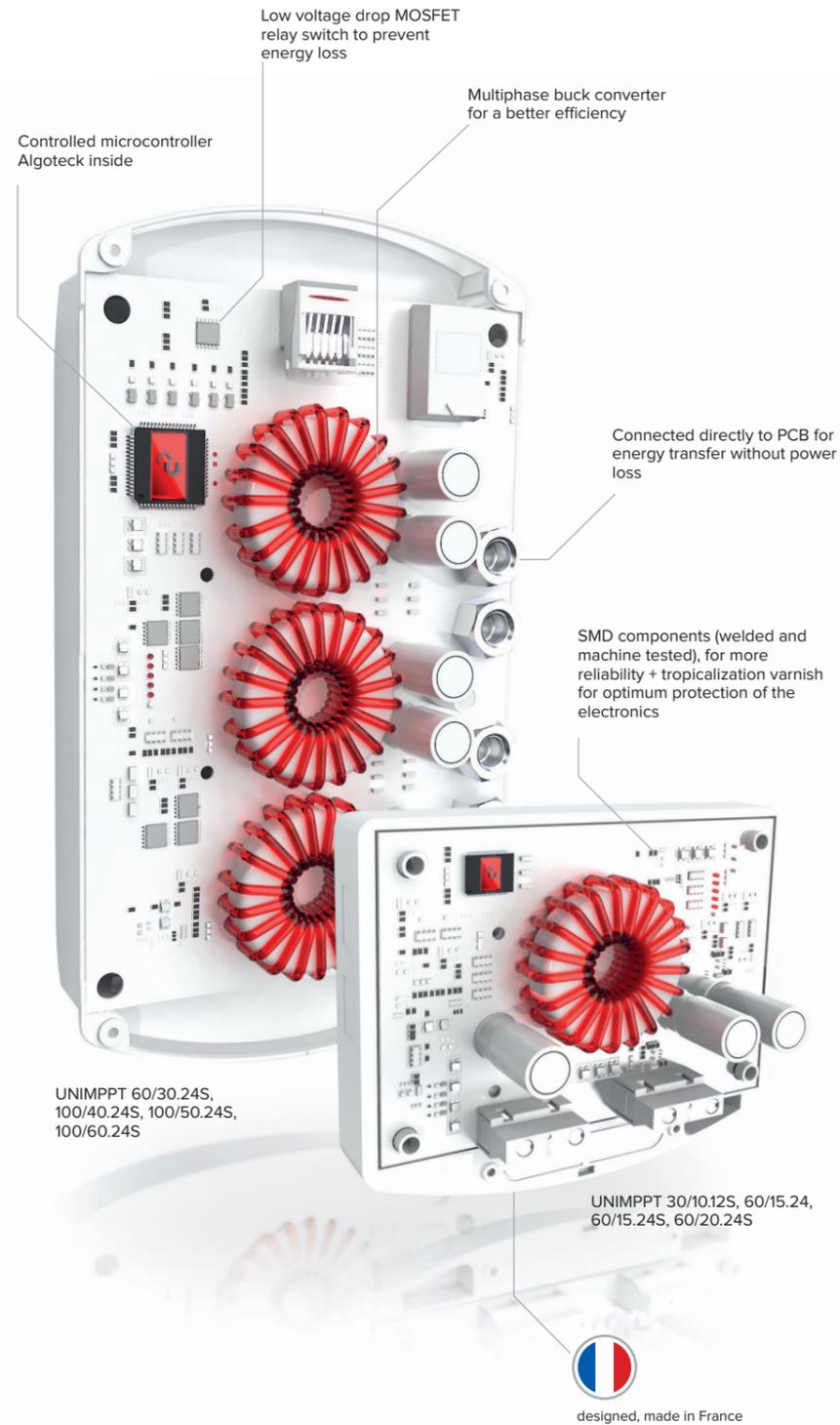


UNIMPPT 60/30.24S, 100/40.24 S, 100/50.24S, 100/60.24S



Normal wiring

ADVANCED CONCEPTION



mppt
TECHNOLOGY

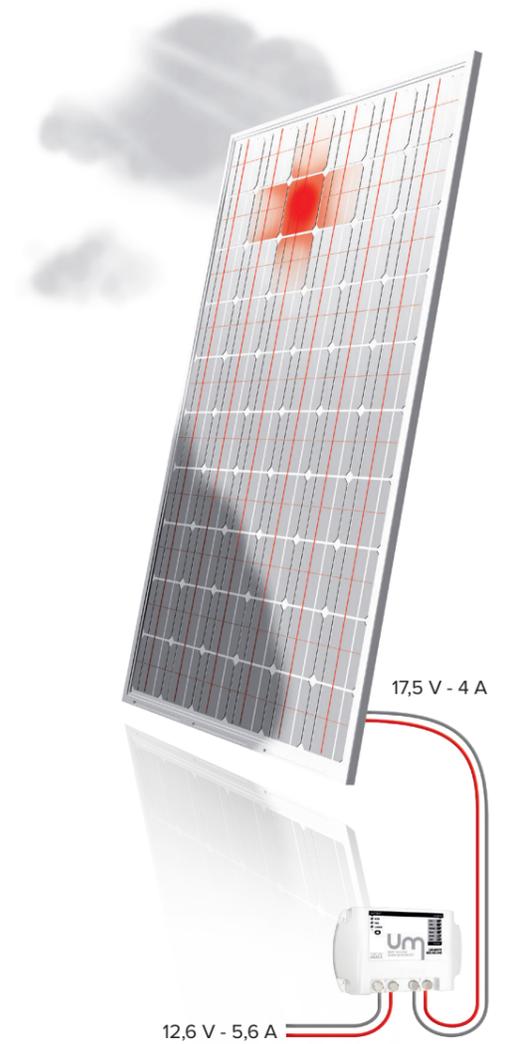
Maximum Power Point Tracking

MPPT VS PWM 20 TO 40% MORE ENERGY

Unlike a PWM regulator, that lowers the panel's voltage to the battery's voltage, an MPPT (inverter charge controller) uses all of the panel's voltage by reconvertng the voltage surplus of panel/battery voltage not used by the battery into charging current (amperes).

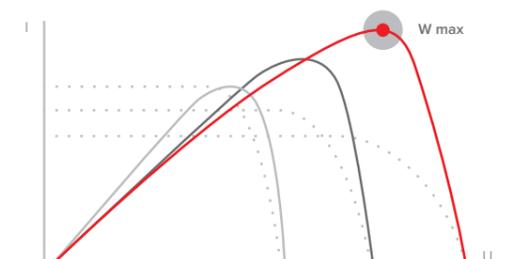
Winter simulation	
Solar panel 100 W	
Panel voltage : 19 V	
Panel current : 5 A	
Controller	
PWM	MPPT
Output voltage	
↘ 12.5 V	↘ 12.5 V
Output current	
→ 5 A	↗ 8 A
Battery	
67 W	95 W (+ 40%)

In summer, the panel voltage decreases with the ambient temperature (average V: 16-17 V), the average gain of a MPPT compared to a PWM is 20%.



UNIMPPT FAST TRACK

Due to clouds and shadows, the light intensity changes rapidly. Thanks to its Fast Track MPPT program and its ultra fast microprocessor, UNIMPPT searches for the maximum power point of the solar panel and then modifies in real time its conversion parameters (input / output) for maximum power.



	UNIMPPT 30/10.12S	UNIMPPT 60/15.24 & 60/15.24S	UNIMPPT 60/20.24S	UNIMPPT 60/30.24S	UNIMPPT 100/40.24 S	UNIMPPT 100/50.24S	UNIMPPT 100/60.24S
	Ref 0989	Ref 0934 & 0972	Ref 1726	Ref 1733	Ref 1467	Ref 2006	Ref 1474
System							
Battery voltage	12 V	12/24 V	12/24 V	12/24 V	12/24 V	12/24 V	12/24 V
Max. charging current	10 A	15 A	20 A	30 A	40 A	50 A	60 A
Self-consumption	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Compatible panel							
Min-max intensity (Voc)	with 12V battery	17-30 V	17-60 V	17-60 V	17-60V	17-100V	17-100V
	with 24V battery	N/A	34-60 V	34-60 V	34-60 V	34-100 V	34-100 V
Max. power	with 12V battery	150 W	250 W	300 W	450 W	600 W	750 W
	with 24V battery	N/A	500 W	600 W	900 W	1200 W	1500 W
Technology							
Max. efficiency	98,00%	98,00%	98,00%	98,00%	98,00%	98,00%	98,00%
Battery charge controller							
Algorithm	Algoteck 6	Algoteck 6	Algoteck 6	Algoteck 6	Algoteck 6	Algoteck 6	Algoteck 6
Voltage selection	N/A	auto	auto	auto	auto	auto	auto
Battery type selection (Gel/ Agm/ Liquid)	yes	yes	yes	yes	yes	yes	yes
Recommended battery capacity	10 - 200 Ah	10 - 300 Ah	10 - 300 Ah	10 - 300 Ah	50 - 800 Ah	50 - 900 Ah	50 - 1200 Ah
Temperature compensation via integrated sensor (temperature)	yes	yes	yes	no	no	no	no
	no	no	no	optional	optional	optional	optional
Panel surge protection	yes	yes	yes	yes	yes	yes	yes
Output controller 12/24V**							
Output current		model 60/15.25 15A DC, 40A max					
Output voltage 12 or 24V (depending on battery)		yes					
Overconsumption protection		yes					
Low battery protection		yes					
Mechanical characteristics							
Max. cable cross section	6 mm ²	6 mm ²	6 mm ²	35 mm ²	35 mm ²	35 mm ²	35 mm ²
International Protection rating	IP32	IP32	IP32	IP32	IP32	IP32	IP32
Operating temperature	-20°/+60 °C	-20°/+60 °C	-20°/+60 °C	-20°/+60 °C	-20°/+60 °C	-20°/+60 °C	-20°/+60 °C
Storage temperature	-35°C/+80 °C	-35°C/+80 °C	-35°C/+80 °C	-35°C/+80 °C	-35°C/+80 °C	-35°C/+80 °C	-35°C/+80 °C
Dimensions (w x h x d) without DIN rail (mm)	137 x 150 x 47	137 x 150 x 47	137 x 150 x 47	127 x 86 x 53	127 x 86 x 53	127 x 86 x 53	127 x 86 x 53
Weight	300 g	350 g	350 g	1 kg	1,1 kg	1,1 kg	1,3 kg
Warranty							
Period	2 years	2 years	2 years	2 years	2 years	2 years	2 years

* Equipped with an output controller, UNIMPPT directly supplies your 12 or 24 V electrical devices (depending on the connected battery). UNIMPPT protects your battery against deep discharges of the battery thanks to a low battery voltage cut, with automatic recovery of the power supply when the battery charge level is sufficient.
Warning : this output is not adapted for an DC-AC inverter connection.

MPPT UNIMPPT charge controllers



UNIMPPT 30/10.12S

10 A-12 V
Max. panel power
150 W - 30 Voc (☐ 12 V)
Ref 0989



UNIMPPT 60/30.24S

30 A-12/24 V
Max. panel power
450 W - 60 Voc (☐ 12 V)
900 W - 60 Voc (☐ 24 V)
Ref 1733



UNIMPPT 60/15.24

15 A-12/24 V
12/24 V output controller
Max. panel power
250 W - 60 Voc (☐ 12 V)
500 W - 60 Voc (☐ 24 V)
Ref 0934



UNIMPPT 100/40.24S

40 A-12/24 V
Max. panel power
600 W - 100 Voc (☐ 12 V)
1200 W - 100 Voc (☐ 24 V)
Ref 1467



UNIMPPT 60/15.24S

15 A-12/24 V
Max. panel power
250 W - 60 Voc (☐ 12 V)
500 W - 60 Voc (☐ 24 V)
Ref 0972



UNIMPPT 100/50.24S

50 A-12/24 V
Max. panel power
750 W - 100 Voc (☐ 12 V)
1500 W - 100 Voc (☐ 24 V)
Ref 2006



UNIMPPT 60/20.24S

20 A-12/24 V
Max. panel power
300 W - 60 Voc (☐ 12 V)
600 W - 60 Voc (☐ 24 V)
Ref 1726



UNIMPPT 100/60.24S

60 A-12/24 V
Max. panel power
900 W - 100 Voc (☐ 12 V)
1800 W - 100 Voc (☐ 24 V)
Ref 1474



UNISENSOR

Remote sensor:
measures voltage and
temperature directly at the
battery's terminal for a more
accurate charge.

RJ45 cable (3m).
W x H x D = 55 x 40 x 30 mm.
30g.
For UNIMPPT 60/30.24S, 100/40.24S,
100/50.24S, 100/60.24S.
Ref 0408