



## - 1.5KW 24V PRO / 2KW 48V PRO CHARGE CONTROLLER -

1.5Kw 24v and 2Kw 48v is new generation Pro Charge Controller. This device is not hybrid but it can be integrated into hybrid system, (important thing is suitable battery and suitable system). Solar charger and Wind charger can be connect parallel into same battery group.

The high-end device can also be used as a monitoring system. It is used to safely and efficiently charge and control your battery with the Wind Generator.

With its discreet appearance, simple operation, with integrated protection functions, this device has high efficiency and low no-load losses. This version of the controller will significantly increase the life and stability of the whole system, especially the batteries.

In addition, the control electronics in the control cabinet monitors the system voltage and brakes the wind turbine when a max. Overvoltage.

The special features and product information are listed below:

Use of external and high quality (Triacs), solid state components. Increasing the life of the controller.

Microprocessor controlled charge with integrated voltage and current limiting. Electromagnetic brake control.Integrated 3-phase short circuit breakers (brake switch)

Protection against lightning strikes. Protection against overcharging, deep discharge, short circuit, overload.

Integrated display.

The generator is automatically braked gently when the battery is full, modern braking system with external load resistance (Dump Load) to avoid the immediate blocking of the turbine. Increasing the life of the stator.

DUMP LOAD MUST BE PLACE IN HORIZONTAL , OTWERWISE IT DOESN'T WORK EFFICIENT

## PRO 1.5KW 24V / 2KW 48V CHARGE CONTROLLER

Nominal Battery Voltage	48VDC	24VDC
Max Input Power Wind Turbine	2,2 Kw	1,6 Kw
Lcd with Display	Amper, Watt, Battery Voltage, Brake, Temperature	Amper, Watt, Battery Voltage, Brake Temperature
Charging Voltage	52,8 V	25,2 V
Charging Current Wind Amperes Max	40 A	60 A
Generator On / Off Switch	After generator stop (after manual brake) please press mode 1 (off), and generator is locked. (Safe braking is achieved in this way  For active operation, please press mode 0 (on) and then close manual brake button	After generator stop (after manual brake) please press mode 1 (off), and generator is locked. (Safe braking is achieved in this way For active operation, please press mode 0 (on) and then close manual brake button
Manual Brake Button	For manual brake, please press "off" mode     For operation, please press "on" mode	For manual brake, please press "off" mode     For operation, please press "on" mode
Reset Button	This button deactives when generator was on automatic brake	This button deactives when generator was on automatic brake
Battery Voltage Min	42 V	21 V
Automatic Brake for Wind Turbine (Over heating )	50 °C breaking / 45°C break out	50 °C breaking / 45°C break out
Automatic Brake for Wind Turbine(Stop Charging Voltage)	58 V -+1	28,8 V +1
Wind Turbine Recharge Voltage	55 V -+1	26,9 V -+1
Cooling	External aluminium cooling fins	External aluminium cooling fins
Cable Termination	Battery (10mm) – Wind turbine and dump load (6mm) – Ground (4mm)	Battery (10mm) – Wind türbine and dump load (6mm) – Ground (4mm)
Protection Class	IP 20 (inside area)	IP 20 (inside area)
Dump Load	2Kw Braking resistor (The load resistance can deviate from Picture)	<ol> <li>1.5Kw Braking resistor (The load resistance can deviate from Picture)</li> </ol>
Operational Temperature	Normal: 20~ + 55 °C / 35~85%RH Industrial: 30~ + 55 °C / 35~85%RH	Normal: 20" + 55 °C / 35"85%RH Industrial : 30" + 55 °C / 35"85%RH
Temperature Conpensation	-4Mv°C/2V,-35°C+80°C , Accuracy +-1°C	-4Mv°C/2V,-35°C+80°C , Accuracy +-1°C
Size	30*30*20 cm	30*30*20 cm
Weight	7 kg	7 kg
Recommended Battery Min	Acid &Gel (It can be redesign according to Lithium batteries	Acid &Gel (It can be redesign according to Lithium batteries

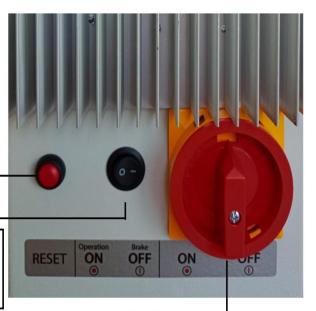




This button deactives when generator was on automatic brake

## Manuel Brake Button:-

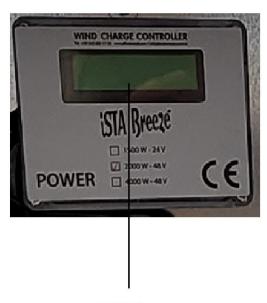
- 1- for manual brake, please press "off"mode
- 2- for operation, please press "on" mode



Generator On / Off Switch:

After generator stop (after manuel brake), please press mode 1 (off) , and generator is locked. (Safe braking is achieved in this way)  $\frac{1}{2} \left( \frac{1}{2} - \frac{1}{2} \right) \left( \frac{1}{2} - \frac{1}{2} - \frac{1}{2} \right) \left( \frac{1}{2} - \frac{1$ 

For active operation, please press mode 0 (on) and then close manual brake button



Lcd Display:

Amper (Ampere), Güç (Watt), Akü (Battery Voltage), Fren (Brake), Temp (Temperature)

