

WS500 PRO BLUETOOTH® ALTERNATOR REGULATOR

The Wakespeed WS500 Pro builds upon the success of the popular WS500 Advanced Alternator Regulator, introducing Bluetooth® connectivity for unmatched convenience.

The WS500 Pro utilises current, voltage, and temperature to deliver the most precise and effective charging possible for 12V, 24V and 48V battery systems – with configurability for voltages in between – and allows users to optimise their mobile power systems, unlocking faster charging speeds, increased efficiency, and seamless integration with numerous battery systems.

Paired with the Wakespeed Configuration and Monitoring Utility Mobile App, users can now wirelessly configure, update, and monitor their alternator charging directly from their smartphones with the WS500 Pro. This newly integrated communication technology and intuitive app, available for both iPhone and Android, also unlocks the potential for exciting future features, ensuring the WS500 Pro Bluetooth® Alternator Regulator remains at the forefront of power management innovation.

- **Bluetooth Connectivity**
allows remote control and real-time monitoring for unmatched convenience.
- **Advanced, Multi-PID Engine Control**
provides the most accurate charging available while actively regulating to desired alternator temperature, rather than reacting after an over-temperature condition occurs.
- **Wide Ranging Compatibility**
for both traditional lead acid & lithium battery technologies, with factory engineered configuration profiles for the largest number of battery brands and chemistries available.
- **Easy to Install**
with the Plug-n-Go feature automatically configuring itself to default settings for easy setup, with fully customisable configuration available for more than 100 user controls.

WAKESPEED



PART #	05-5002
PRODUCT NAME	WS500 PRO BLUETOOTH® ALTERNATOR REGULATOR
SYSTEM VOLTAGE	
12V	YES, AUTO-DETECT
24V	YES, AUTO-DETECT
48V	YES, AUTO-DETECT
OTHER	YES, CUSTOM ADJUSTABLE
FIELD POLARITY	
A-TYPE (N)	SELECT COMPATIBLE WIRING HARNESS TO MATCH ALTERNATOR POLARITY
B-TYPE (P)	SELECT COMPATIBLE WIRING HARNESS TO MATCH ALTERNATOR POLARITY
REGULATION CAPABILITY	
VOLTAGE	YES, VIA SENSE WIRES INCLUDED IN WIRING HARNESS
CURRENT	YES, VIA AMP SHUNT
TEMPERATURE	YES, VIA ALTERNATOR AND BATTERY TEMPERATURE SENSORS
BASIC CONFIGURATION	
VIA BUILT-IN DIP SWITCH	CHARGE PROFILE BY BATTERY TYPE, BATTERY CAPACITY, AND ALTERNATOR OUTPUT RANGE
VIA WAKESPEED APPLICATION	FULLY CUSTOMISED/OPTIMISED CONFIGURATION FOR BATTERY, ALTERNATOR AND SYSTEM VIA BLUETOOTH
BATTERY CHARGE PROFILES	
8 PRESET PROGRAMS	AGM, STANDARD FLA, DEEP CYCLE FLA, HD AGM, GEL, CARBON FOAM, CUSTOM #1, CUSTOM #2 (LIFEPO4)
CHARGE PHASE CRITERIA	FLEXIBLE CHARGING PROTOCOL
ADVANCED CONFIGURATION	
VIA USB PORT	100+ ADVANCED ADJUSTMENTS ACCESSIBLE VIA ASC11 TERMINAL SOFTWARE
VIA APP	ACCESS TO MONITORING, PROGRAMMING AND DIAGNOSTIC FUNCTIONS VIA BLUETOOTH
COMMUNICATION	
CONTROL AREA NETWORK (CAN)	YES, J1939-BASED CAN
USB	YES, BUILT-IN MICRO USB
FIELD OUTPUT CONTROL	
DEFAULT VALUES	LARGE ALTERNATOR MODE (100%), SMALL ALTERNATOR MODE (75%), HALF POWER MODE (50%)
ADVANCED CONFIGURABLE	MAXIMUM FIELD BANDWIDTH ADJUSTABLE FROM 0% TO 100%
REGULATOR DISPLAY	
ONBOARD LED	OPERATIONAL AND TROUBLESHOOTING DATA VIA BLINK PATTERN
REMOTE DISPLAY	VIA CAN TO REMOTE DISPLAYS
TEMPERATURE SENSING	
ALTERNATOR	YES, INCLUDED IN WIRING HARNESS (SOLD SEPERATELY)
BATTERY	YES, BATTERY TEMPERATURE SENSOR CABLE (SOLD SEPERATELY)
INTERNAL	YES
ENCLOSURE	
DIMENSIONS (MM)	190 X 120 X 48
WEIGHT (KG)	0.762
CERTIFICATION	CE CERTIFIED & FCC COMPLIANT
WIRING HARNESS	COLOUR CODED TINNED WIRE
TERMINAL CONNECTIONS	AMPEAL 23-PIN WATERPROOF RUGGEDIZED RJ45 (CAN)
USB CONNECTOR	MICRO USB