

WIRELESS CHARGING 24V

AB-WLC-3000

ATOMBOTIX



High Power Output



3000W rated power for rapid and efficient charging of high-power devices

Efficient Charging



≥87% max transmission efficiency for fast power transfer and time-saving

Intelligent Charging Management



Constant-current to constant-voltage mode for optimized performance

Moderate Working Distance & Offset Tolerance



40 - 80 mm vertical, X-axis 50 mm & Y-axis 10 mm horizontal

Sturdy & Protective Structure



Emitter, receiver & power supply box with IP65, IP65 & IP54 protection levels

Safety and Reliable



The contactless charging mechanism eradicates the potential hazards of electric shock and current leakage

Model	AB-WLC1500-24V50A	AB-WLC3000-24V100A
Electrical Parameters		
Rated Power	1500 W	3000 W
Pre-stage Power Supply Voltage Input	110-264 VAC	110-264 VAC
Rated Output Voltage Range	20-30 VDC	21-30 VDC
Rated Output Current Range	50 A ± 1 A	100 A ± 1 A
Max. Transmission Efficiency	87%	85%
Essential Parameters		
Vertical Working Distance	40-50 mm	0-80 mm
Max. Horizontal Offset Distance	X - axis: 20 mm; Y - axis: 10 mm	X - axis: 50 mm; Y - axis: 10 mm
Charging Management	Constant - current & constant - voltage	Constant - current & constant - voltage
Over-temperature Protection	75±2°C	75±2°C
Output Over-current Protection	≥ 55 A	≥ 104 A
Output Over-voltage Protection	≥ 31 VDC	≥ 31 VDC
Communication	RS485, CAN	RS485, CAN
Alarm and Charging Status Indication	Indicator light alarm	Indicator light alarm
RF Data Communication Frequency	2.4 GHz	2.4 GHz
Cooling Method	Natural cooling	Natural cooling

Dimensions

Transmitter Size	$(300 \pm 2) \text{ mm} \times (300 \pm 2) \text{ mm} \times (80 \pm 0.5) \text{ mm}$	$(300 \pm 2) \text{ mm} \times (300 \pm 2) \text{ mm} \times (80 \pm 0.5) \text{ mm}$
Receiver Size	$(250 \pm 2) \text{ mm} \times (250 \pm 2) \text{ mm} \times (70 \pm 0.5) \text{ mm}$	$(250 \pm 2) \text{ mm} \times (250 \pm 2) \text{ mm} \times (70 \pm 0.5) \text{ mm}$ $(300 \pm 2) \text{ mm} \times (300 \pm 2) \text{ mm} \times (116 \pm 1) \text{ mm}$ (Including radiator)
Front-stage Power Supply Size	$(520 \pm 1) \text{ mm} \times (300 \pm 1) \text{ mm} \times (123 \pm 2) \text{ mm}$	$(520 \pm 1) \text{ mm} \times (300 \pm 1) \text{ mm} \times (123 \pm 2) \text{ mm}$
Transmitter Weight	10 kg	9 kg
Receiver Weight	10 kg	14.5 kg 18.2 kg(Including radiator)
Front-stage Power Supply Weight	13.5 kg	13.5 kg

Environment Parameters

Working Temperature	$-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$	$-40^{\circ}\text{C} \sim 60^{\circ}\text{C}$
Working Humidity	$\leq 85\%$	$\leq 85\%$
Storage Temperature	$-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$	$-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$

Protection Level

Emitter Protection Level	IP65	IP65
Receiver Protection Level	IP65	IP67
Power Supply Box Protection Level	IP54	IP54

