

NEW PRODUCT



10 kW Wireless Charging System MOOV^{air} 10

Highly efficiency wireless charging for industrial electric vehicles providing up to 275 A. Ideal for fast and opportunity charging.

Versatile Charging

- Each base can charge 24 V, 36 V and 48 V batteries
- Unmanned 24/7 operation
- Can be used in a wide range of harsh and polluted environments.

Easy Integration

- Fully automated charging
- Power transfer over a 150 mm (6") gap
- Ethernet for integrating to a warehouse management system
- CAN bus for connecting vehicle systems

Wireless Power Transfer

- Efficiency meets or exceeds traditional wired chargers
- No connector wear
- No maintenance downtime to replace worn connectors
- Safe operation. Meets all industrial standards for wireless power transfer

Product Overview



Primary Box (WPB)



Primary Pad (WPP)



Secondary Unit (WSU)

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Specifications

AC Input				
AC Input Rated Voltage		380 to 480 V _{AC} 3PH		
AC Input Voltage Range		342 to 528 V _{AC} 3PH		
AC Input Frequency		47 Hz to 63 Hz		
Maximum AC Input Current		18 A		
Power Factor (100% Load)		0.95		
Peak Efficiency		> 92%		
Standby Power ¹		≤ 10 W		
DC Output				
DC Output Nominal Voltage		24 & 36 V _{DC} 48 V _{DC}		
DC Output Voltage Range		18 to 44 V _{DC} 36 to 60 V _{DC}		
Maximum Charge Current		275 A200 A		
Maximum Output Power		10 kW		
Battery Protection		Lithium Ion		
Output Protection		Over voltage, over current, short circuit, reverse connection		
Parallel Operation		Pending		
Standby Power ²		< 2 W		
Environmental Conditions				
Operating Temperature ³	WPB	+ 5 °C to + 40 °C (41 °F to 104 °F)		
	WPP	-40 °C to + 70 °C (-40 °F to 158 °F)		
	WSU	-40 °C to + 80 °C (-40 °F to 176 °F)		
Storage Temperature		-45 °C to + 70 °C (-49 °F to 158 °F)		
Relative Humidity	WPB	5% to 85%, non-condensing		
	WPP	4% to 100%		
	WSU	15% to 100%		
Maximum Operating Altitude		3,000 m (9,842 ft)		
Ingress Protection	WPB	IP21		
	WPP	IP69		
	WSU	IP69		
Mechanical Design				
Pad Air-gap Range		105 ^{+/-5} to 155 ^{+/-5} mm (4.1 ^{+/-0.2} to 6.1 ^{+/-0.2} in)		
Maximum Misalignment		± 50 mm (± 2.0 in) up/down and left/right		
Dimensions (L x W x H)	WPB	1,050 x 550 x 400 mm (41.3 x 21.7 x 15.7 in)		
	WPP	665 x 695 x 65 mm (26.1 x 27.4 x 2.6 in)		
	WSU	565 x 327 x 50 mm (22.2 x 12.9 x 2 in)		
Weight	WPB	107 kg (235.9 lbs)		
	WPP	30 kg (66.1 lbs)		
	WSU	15 kg (33.1 lbs)		
Cable Lengths	WPB → WPP	5.0 m (196.8 in)		
	WSU (DC Output)	2.0 m (78.7 in)		
	WSU Aux / Comms	0.5 m (19.7 in)		
Cooling	WPB	Forced air		
	WPP	Convection		
	WSU	Convection		
Status LED's		WPB & WPP, stack light interface		
Approvals and Compliance		Europe (EEA/EFTA/UK)	USA	Canada
Safety Marks		CE	cMET _{US}	
Safety		EN 62368-1:2014 + A11:2017	UL 62368-1:2019 Ed.3 CSA C22.2 No.62368-1:2019 Ed.3 UL 1564 Ed.4 CSA 22.2 No. 107.2-01	
EMC		EN 303 446-2 V1.2.1 EN 301 489-1 V2.2.3; EN 301 489-3 V1.6.1 EN 55011:2016 + A1:2017+A11 :2020 EN IEC 61000-6-2:2019	FCC part 18 subpart C	Pending
RF		EN 300 330	FCC part 15 subpart C	Pending
EMF		EN 62311	FCC Part 1.1307 KDB 447498 D01 KDB 680106 D01	Pending
Interfaces				
Infrastructure		Ethernet		
Vehicle		CANopen [®]		

¹ WPB connected to AC but not charging

² Secondary Unit connected to battery and not charging