

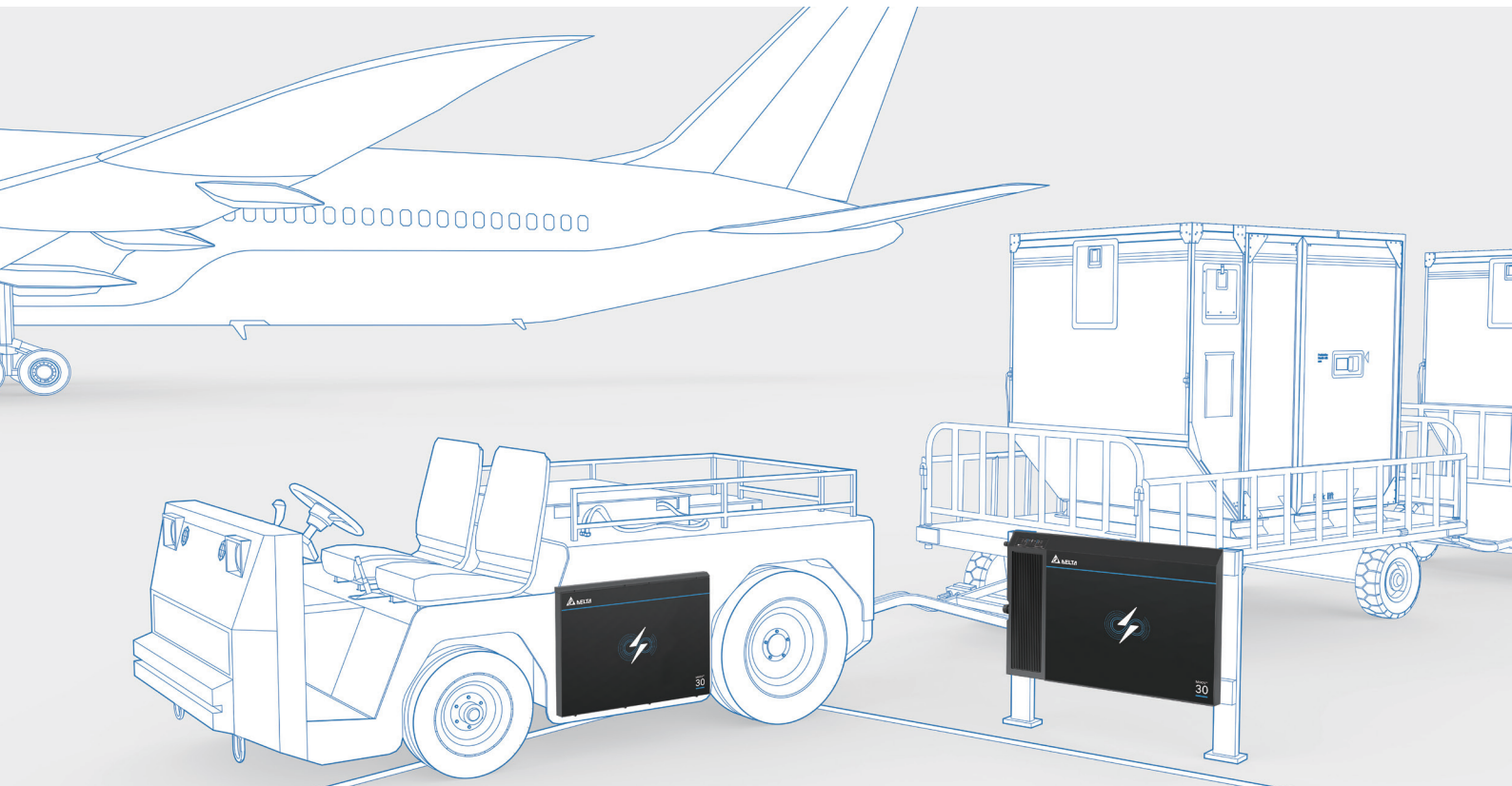
## 30 kW Wireless Charging System

### MOOV<sup>air</sup> 30

Highly efficiency wireless charging for industrial electric vehicles providing up to 300 A. Ideal for fast and opportunity charging.

- No part wear
- Fully automated charging
- Charges lithium batteries fast and frequently

# MOOV<sup>air</sup> 30 Wireless Charging System



## Versatile Charging

- Multiple vehicles can share one base
- Unmanned 24/7 operation
- Can be used in a wide range of harsh and polluted environments.

## Easy Integration

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

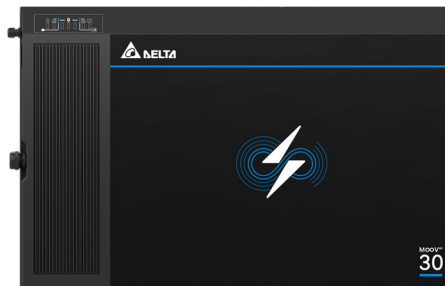
## Wireless Power Transfer

- 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)

# Specifications

Product Line		MOOV <sup>air</sup> 30
<b>AC Input</b>		
AC Input Rated Voltage	380 to 480 V <sub>AC</sub> 3PH	
AC Input Voltage Range	342 to 528 V <sub>AC</sub> 3PH	
AC Input Frequency	47 Hz to 63 Hz	
Maximum AC Input Current	48 A	
Power Factor (100% Load)	0.95	
Peak Efficiency	> 95%	
Standby Power <sup>1</sup>	≤ 10 W	
<b>DC Output</b>		
DC Output Nominal Voltage	100 V <sub>DC</sub>	
DC Output Voltage Range	72 to 120 V <sub>DC</sub>	
Maximum Charge Current	300 A	
Maximum Output Power	30 kW	
Battery Type	Lithium Ion	
Output Protection	Over voltage, over current, short circuit, reverse connection	
Parallel Operation	Pending	
Standby Power <sup>2</sup>	< 2 W	
Charge Modes	Set points from vehicle	CANopen <sup>®</sup>
<b>Environmental Conditions</b>		
Operating Temperature <sup>3</sup>	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
<b>Mechanical Design</b>		
Pad Air-gap Range	105 <sup>+/-5</sup> to 155 <sup>+/-5</sup> mm (4.1 <sup>+/-0.2</sup> to 6.1 <sup>+/-0.2</sup> in)	
Maximum Misalignment	± 50 mm (± 2.0 in) up/down and left/right	
Dimensions (L x W x H)	WPB	1020 x 550 x 400 mm (40.2 x 21.7 x 15.7 in)
	WPP	665 x 1020 x 65 mm (26.2 x 40.2 x 2.6 in)
	WSU	565 x 735 x 50 mm (22.2 x 28.9 x 2.0 in)
Weight	WPB	105 kg (231.5 lbs)
	WPP	77 kg (169.7 lbs)
	WSU	47 kg (103.6 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 <sub>US</sub>	
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

1 WPB connected to AC but not charging

2 Secondary Unit connected to battery and not charging

3 Derating above 40 °C



More information

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March 2024 Revision 3.0

