

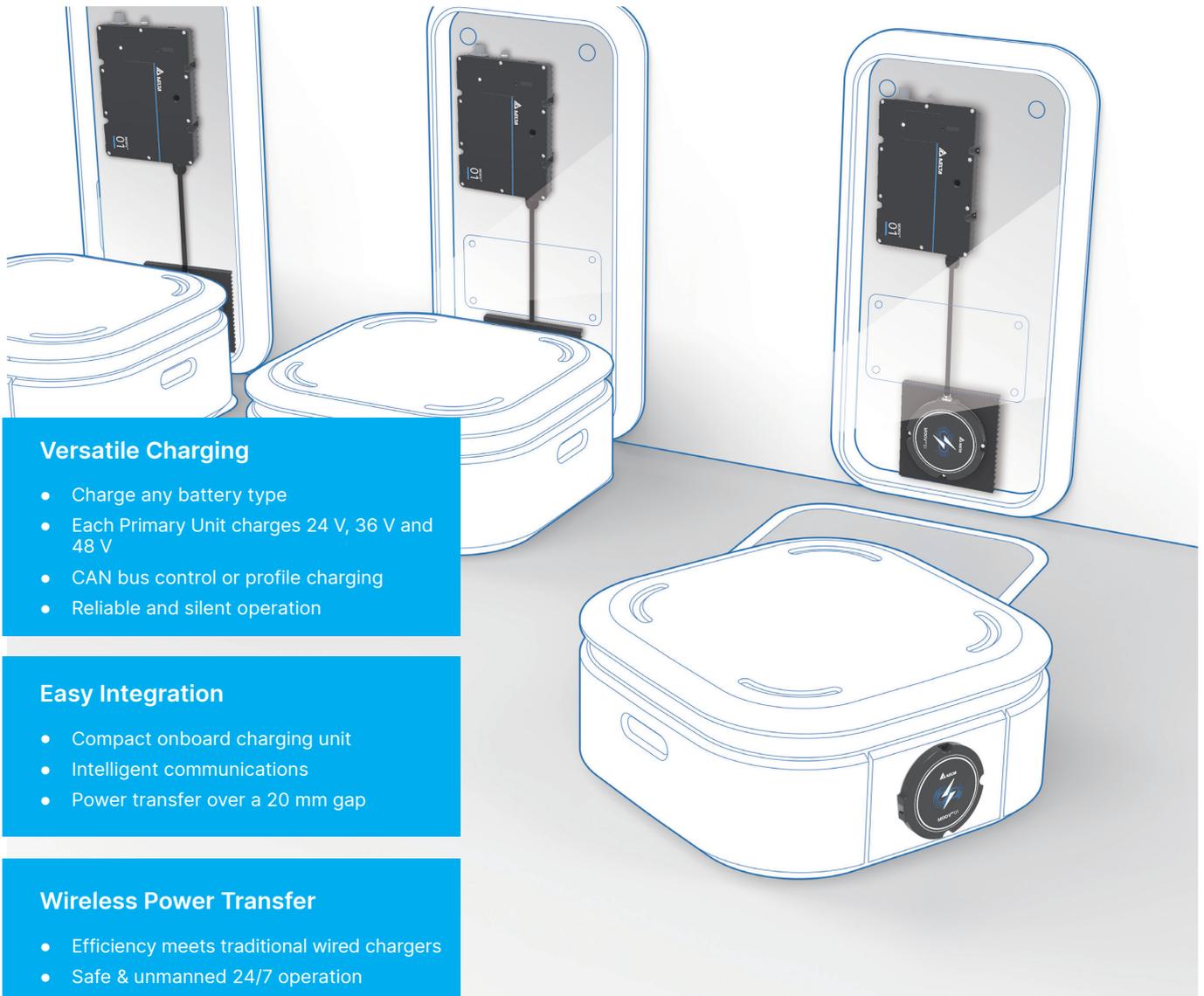


1 kW Wireless Charging System MOOV^{air} 01

Highly efficient wireless charging for industrial applications including electric vehicles and AGVs.

- No part wear
- Fully automated charging
- Low weight on vehicle

1 kW Wireless Charging System



Versatile Charging

- Charge any battery type
- Each Primary Unit charges 24 V, 36 V and 48 V
- CAN bus control or profile charging
- Reliable and silent operation

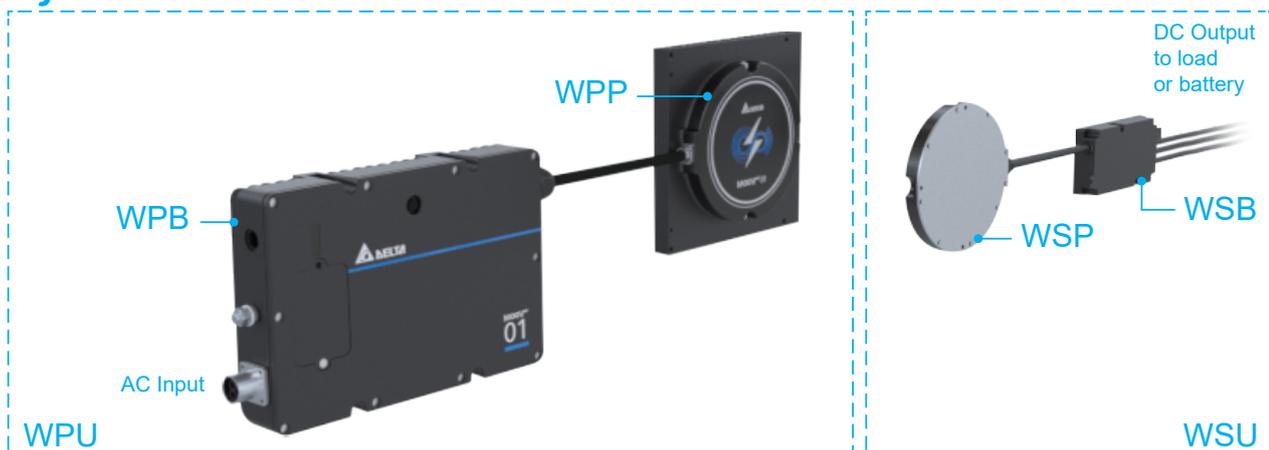
Easy Integration

- Compact onboard charging unit
- Intelligent communications
- Power transfer over a 20 mm gap

Wireless Power Transfer

- Efficiency meets traditional wired chargers
- Safe & unmanned 24/7 operation
- No connector wear
- No maintenance downtime

System Overview



Specification

Product Line		MOOV ^{air} 01		
AC Input				
AC Input Rated Voltage		100 to 240 V _{AC} 1PH		
AC Input Voltage Range		85 to 265 V _{AC}		
AC Input Frequency		50 / 60 Hz (47 to 63 Hz)		
Maximum AC Input Current		12 A		
Power Factor (100% Load)		> 0.95		
Peak Efficiency		92% (24 V version), 93% (36 V and 48 V version)		
Standby Power ¹		< 8 W		
DC Output				
DC Output Nominal Voltage		24 V _{DC}	48 V _{DC}	36 V _{DC}
DC Output Voltage Range		12 to 30 V _{DC}	24 to 60 V _{DC}	18 to 45 V _{DC}
Maximum Charge Current		41.7 A	20.8 A	27.7 A
Maximum Output Power		1000 W		
Battery Type		Lithium Ion, Lead Acid (AGM / GEL)		
Output Protection		Over voltage, over current, short circuit, reverse connection		
Parallel Operation		Up to 4 systems in CAN mode		
Standby Power ²		< 2 W		
Charge Modes	Set points from vehicle	CANbus		
	Pre-programmed standalone operation	Multi-stage charge profile		
Environmental Conditions				
Operating Temperature ³		-20 °C to +50 °C (-4 °F to + 122 °F)		
Storage Temperature		-40 °C to +85 °C (-40 °F to + 185 °F)		
Relative Humidity		0% to 95%, non-condensing		
Maximum Operating Altitude		3000 m (9842 ft)		
Shock / Vibration		25 g / 5 g		
Ingress Protection ⁴	WPB	IP65		
	WPP and WSP	IP65		
	WSB	IP40		
Mechanical Design				
Pad Air Gap Range		0 mm to 20 mm (0.8 in)		
Maximum Misalignment		20 mm (0.8 in)		
Dimensions (H x W x D)	WPB	192 x 280 x 60 mm (7.6 x 11.0 x 2.4 in)		
	WPP and WSP	Ø 160 x 19.5 mm (6.3 x 0.8 in)		
	WSB	168 x 82 x 28 mm (6.6 x 3.2 x 1.1 in)		
Cable Length (WPU)	WPP	1120 mm (44.1 in) typical		
Cable Length (WSU)	DC Output	500 mm (19.7 in)		
	Signals	100 mm (1.97 in)		
	WSP	380 mm (15 in)		
Weight	WPB and WPP	5.4 kg (11.9 lb)		
	WSB and WSP	1.5 kg (3.3 lb)		
Cooling	WPB	Natural convection		
	WSB and WSP	Contact		
Status LEDs		WPB		

Approvals and Compliance	USA / Canada	Europe
Safety marks	cDEKRA _{US}	CE
Safety	UL 60950-1 / UL 62368-1 CAN/CSA C22.2 no. 60950-1 / no. 62368-1	EN 60950-1, EN 62368-1
EMC	FCC 15B, 18B, ICES-003, RSS-216, Class A ⁴	ETSI EN 301 489-1, ETSI EN 301 489-17, EN 55011, EN 61000-6-4, EN 61000-6-2, Class A ⁴
RF	FCC Part 15.247, FCC Part 15.209, RSS-247	ETSI EN 300 328
EMF	EN 62311, IEEE C95.3	

1 WPB connected to AC but not charging

2 Secondary Unit connected to battery and not charging

3 Derating above 40 °C

4 Class B available on request



More information

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