

1 kW Wireless Charging System MOOV^{air}

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

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



Wireless Power
Transfer

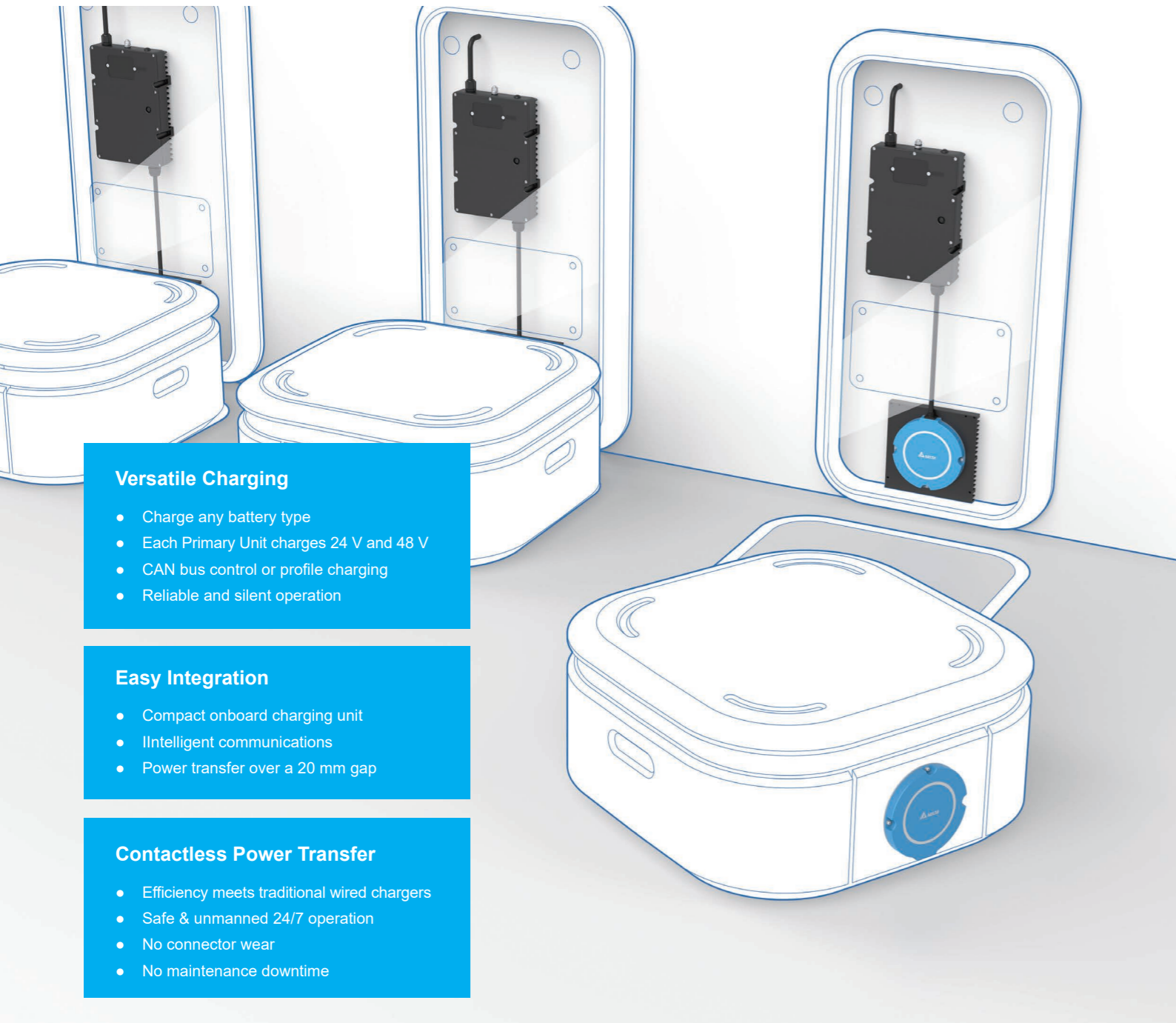


Battery
Charging



Industrial

1 kW Wireless Charging System



Versatile Charging

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

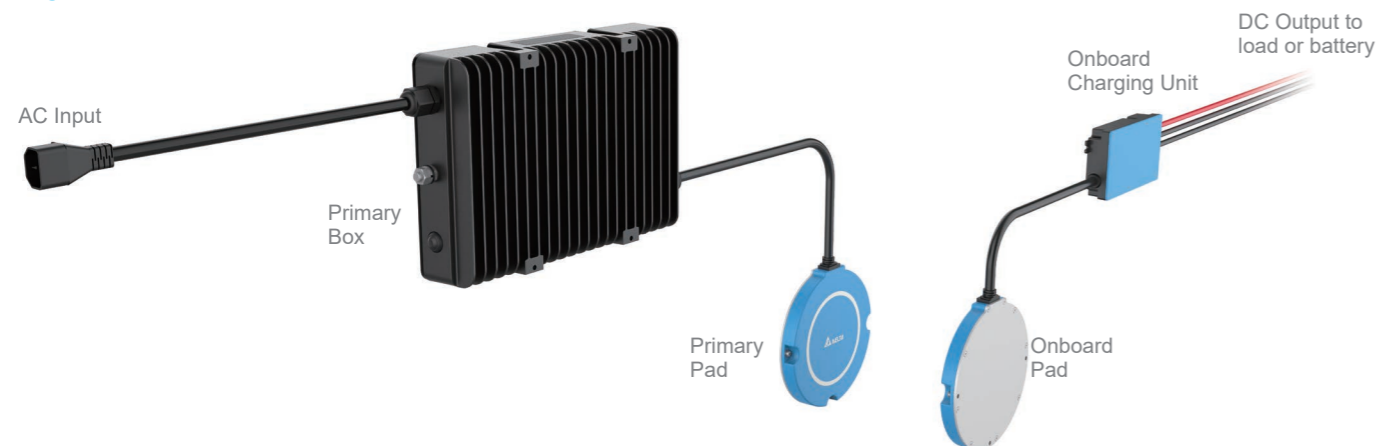
Easy Integration

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

Contactless Power Transfer

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

System Overview



Specification

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	13 A	
Power Factor (100% Load)	> 0.95	
Peak Efficiency (100% Load)	92% (24 V version), 93% (48 V version)	
DC Output		
DC Output Nominal Voltage	24 V _{DC}	48 V _{DC}
DC Output Voltage Range	12 to 30 V _{DC}	24 to 60 V _{DC}
Maximum Charge Current	41.7 A	20.8 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 chargers for a maximum of 4 kW	
Environmental Conditions		
Operating Temperature	-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 ¹	Primary Box	IP65
	Pads	IP65
	Onboard Charging Unit	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)	Primary Box	192 x 280 x 60 mm (7.6 x 11.0 x 2.4 in)
	Primary Pad and Onboard Pad	Ø 160 x 19 mm (6.3 x 0.7 in)
	Onboard Charging Unit	168 x 82 x 28 mm (6.6 x 3.2 x 1.1 in)
Cable Length (Primary Box)	AC Input	960 mm (37.8 in)
	Primary Pad	1120 mm (44.1 in) typical
Cable Length (Onboard Electronics)	DC Output	500 mm (19.7 in)
	Signals	100 mm (1.97 in)
	Onboard Pad	380 mm (15 in)
Weight	Primary Box and Pad	5.4 kg (11.9 lb)
	Onboard Charging Unit and Pad	1.5 kg (3.3 lb)
Cooling	Primary Box	Natural convection
	Onboard Charging Unit	Contact
Status LEDs	Primary box	
Approvals and Compliance		USA / Canada
Safety marks		cMETus
Safety		UL 60950-1 / UL 62368-1 CAN/CSA C22.2 no. 60950-1 / no. 62368-1
EMC		FCC 15B, 18B, ICES-003, RSS-216, Class A ¹
RF		FCC Part 15.247, FCC Part 15.209, RSS-247
EMF		EN 62311, IEEE C95.3
		Europe
		CE
		EN 60950-1, EN 62368-1
		ETSI EN 301 489-1, ETSI EN 301 489-17, EN 55011, EN 61000-6-4, EN 61000-6-2, Class A ¹
		ETSI EN 300 328

Notes: Delta reserves the right to modify without prior notice

1) Class B available on request



More information

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