1 kW Wireless Charging System

MOOV air

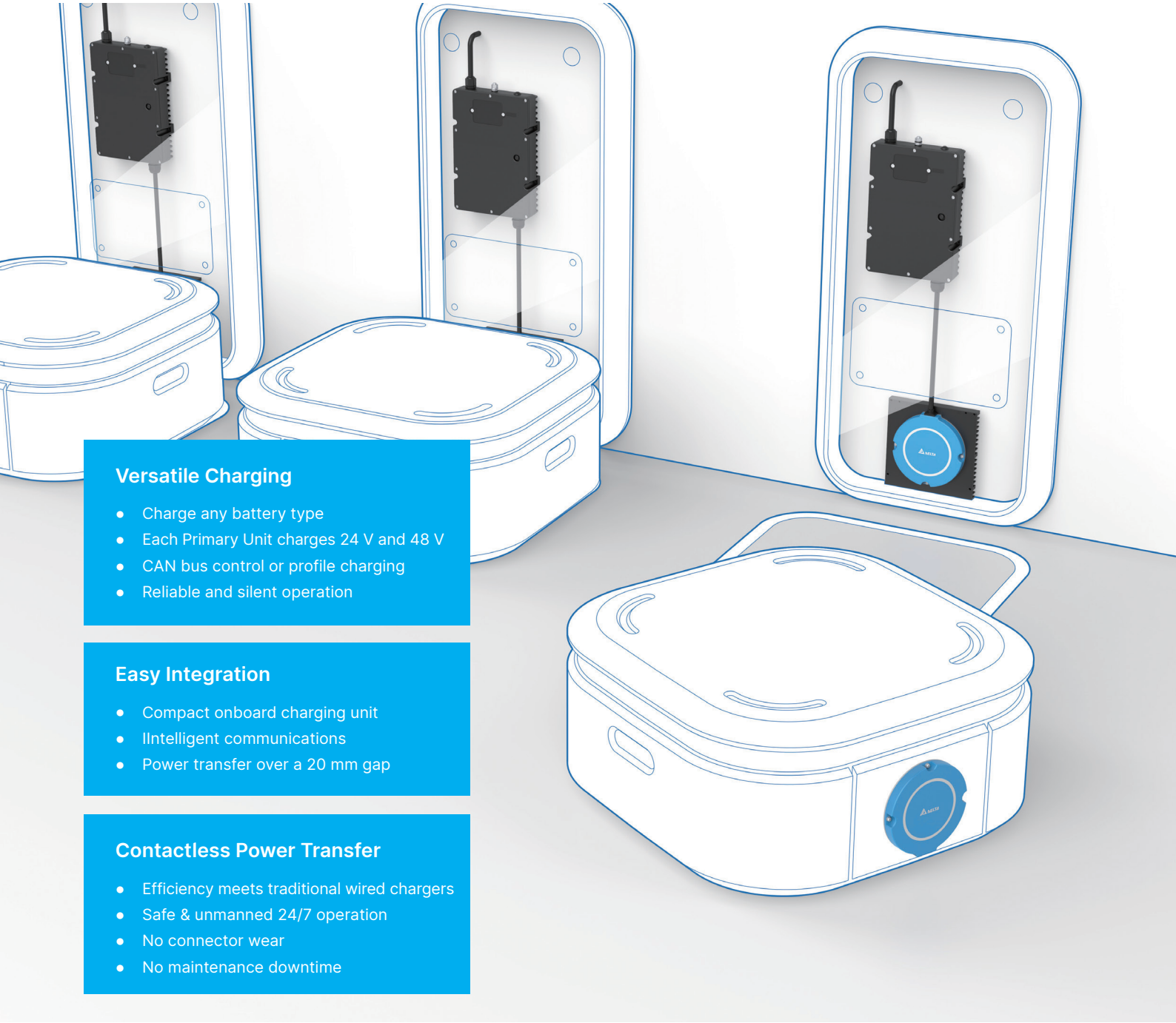
Highly efficient contactless charging for industrial applications including electric vehicles

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

Wireless Power Transfer | Battery Charging | Industrial

DELTA

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

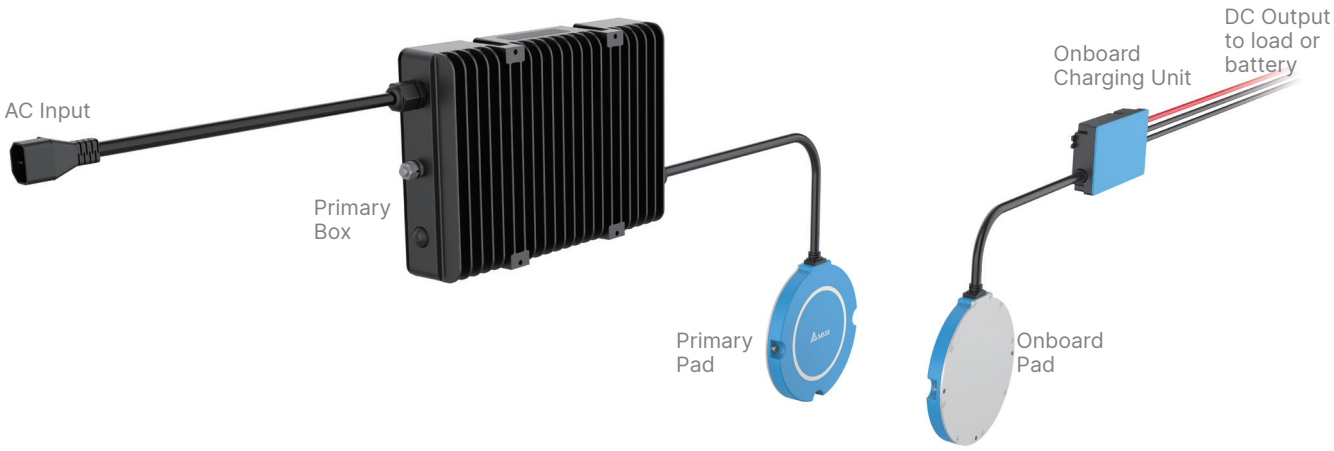
Easy Integration

- Compact onboard charging unit
- IIntelligent 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		12 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**	**Europe**
Safety marks		$_{c}$MET$_{US}$	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[1]	ETSI EN 301 489-1, ETSI EN 301 489-17, EN 55011, EN 61000-6-4, EN 61000-6-2, Class A[1]
RF		FCC Part 15.247, FCC Part 15.209, RSS-247	ETSI EN 300 328
EMF		EN 62311, IEEE C95.3	

Notes: Delta reserves the right to modify without prior notice
1) Class B available on request

Smarter. Greener. Together.

Delta Energy Systems (Germany) GmbH
Tscheulinstrasse 21, 79331 Teningen
E-mail: IEV.sales@deltaww.com

More information

www.deltaww.com

2022 / 09 Version 2.2