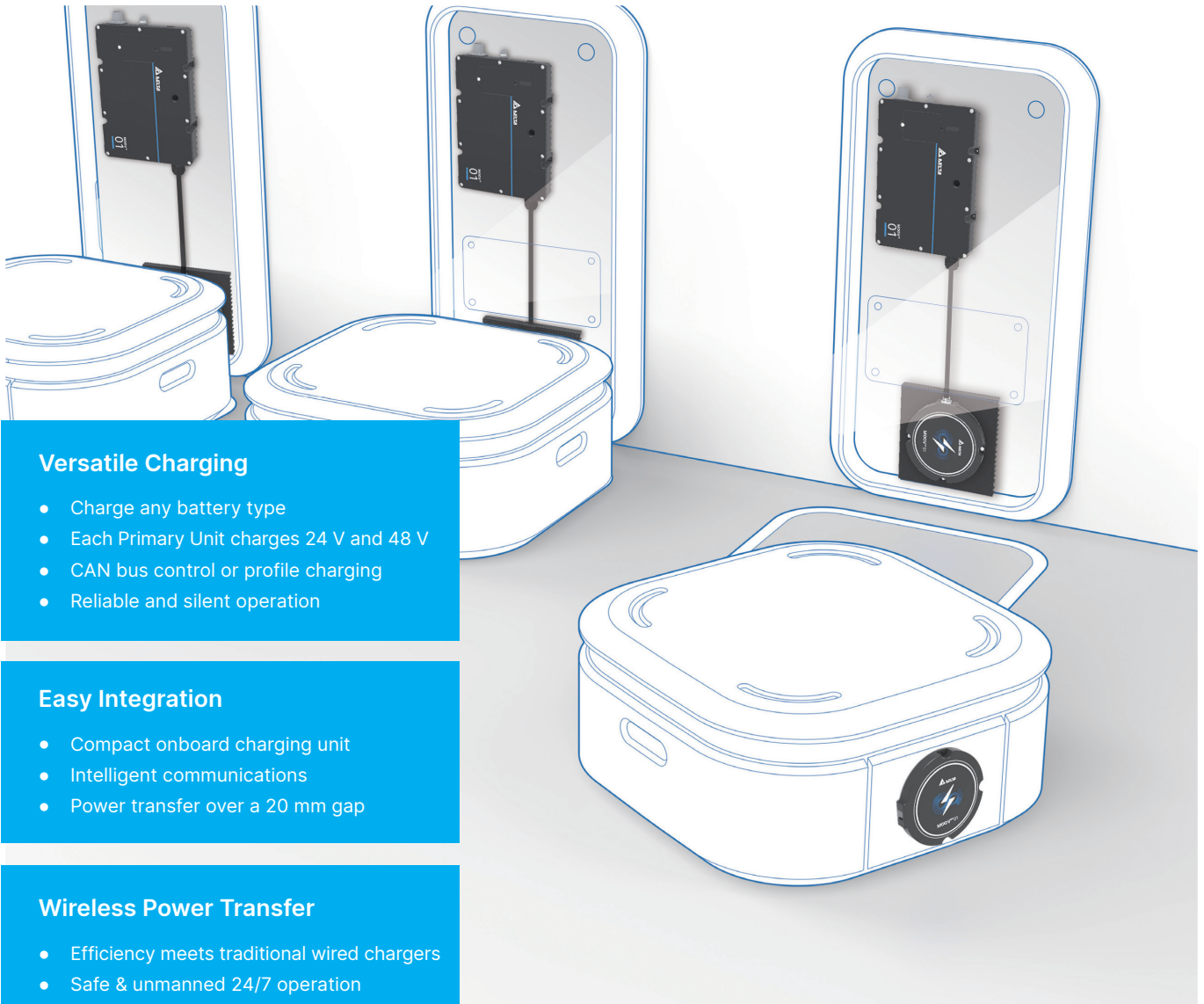


## 1 kW Wireless Charging System MOOV<sup>air</sup> 01

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 and 48 V
- CAN bus control or profile charging
- Reliable and silent operation

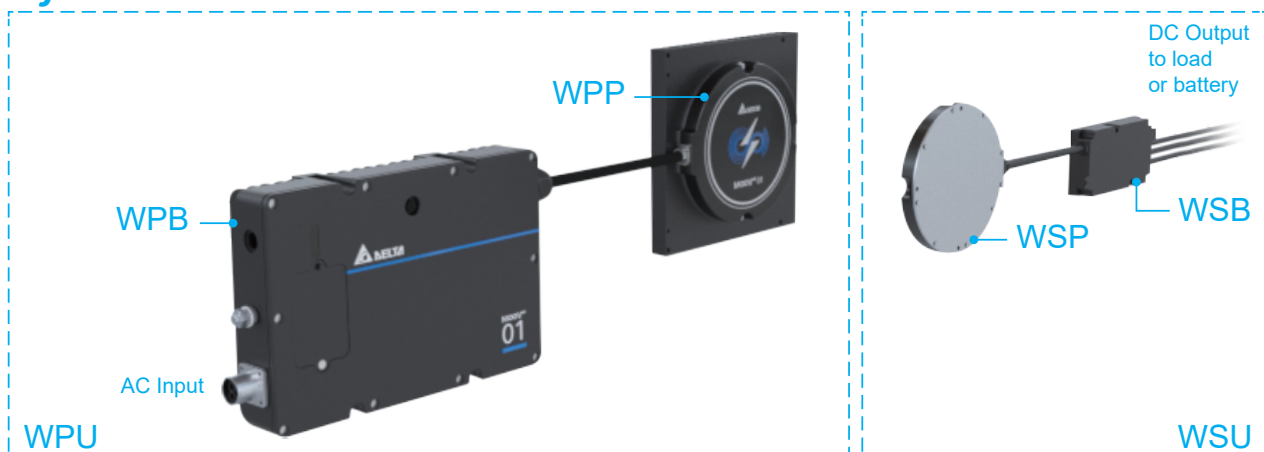
## Easy Integration

- 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 <sup>air</sup> 01                  |   |  |
|---------------------------------|--|---|---|--|
| <b>AC Input</b>                 |  |   |   |  |
| AC Input Rated Voltage          | 100 to 240 V <sub>AC</sub> 1PH   |   |   |  |
| AC Input Voltage Range          | 85 to 265 V <sub>AC</sub>  |   |   |  |
| 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% (48 V version)                                 |   |   |  |
| Standby Power <sup>1</sup>      | < 8 W  |   |   |  |
| <b>DC Output</b>                |  |   |   |  |
| DC Output Nominal Voltage       | 24 V <sub>DC</sub>   | 48 V <sub>DC</sub>                      | 36 V <sub>DC</sub>  |  |
| DC Output Voltage Range         | 12 to 30 V <sub>DC</sub>   | 24 to 60 V <sub>DC</sub>                | 18 to 45 V <sub>DC</sub>  |  |
| 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 chargers for a maximum of 4 kW                                 |   |   |  |
| Standby Power <sup>2</sup>      | < 2 W  |   |   |  |
| <b>Environmental Conditions</b> |  |   |   |  |
| 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 <sup>1</sup> | WPB  | IP65                                    |   |  |
|                                 | WPP and WSP  | IP65                                    |   |  |
|                                 | WSB  | IP40                                    |   |  |
| <b>Mechanical Design</b>        |  |   |   |  |
| 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 mm (6.3 x 0.7 in)            |   |  |
|                                 | WSB  | 168 x 82 x 28 mm (6.6 x 3.2 x 1.1 in)   |   |  |
| Cable Length (WPB)              | AC Input   | 960 mm (37.8 in)                        |   |  |
|                                 | WPP  | 1120 mm (44.1 in) typical               |   |  |
| Cable Length (WSB and WSP)      | 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  |   |   |  |
| <b>Approvals and Compliance</b> |  | <b>USA / Canada</b>                     | <b>Europe</b>   |  |
| Safety marks                    | cMET <sub>US</sub>   |   | CE  |  |
| Safety                          | UL 60950-1 / UL 62368-1<br>CAN/CSA C 22.2 no. 60950-1 /<br>no. 62368-1 |   | EN 60950-1, EN 62368-1  |  |
| EMC                             | FCC 15B, 18B, ICES-003,<br>RSS-216, Class A <sup>1</sup>               |   | ETSI EN 301 489-1, ETSI EN 301 489-17,<br>EN 55011, EN 61000-6-4, EN 61000-6-2,<br>Class A <sup>1</sup> |  |
| RF                              | FCC Part 15.247, FCC<br>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



More information

**Delta Energy Systems (Germany) GmbH**

Tscheulinstrasse 21, 79331 Teningen

E-mail: [IEV.sales@deltaww.com](mailto:IEV.sales@deltaww.com)

[www.deltaww.com](http://www.deltaww.com)

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