

Benefits of Contact-less Charging

170mm

- ROBUST TO MISALIGNMENT

 Even if the coil gap shifts, a preset level of electric power is supplied with high efficiency.
- EASY INSTALLATION AND RELOCATION

 Flexible support not only for inital set up, but also for production line updates.
- ✓ LARGE CAPACITY LINEUP FOR RAPID CHARGING
 Charge parameters can be freely. Unit supports rapid-charging devices.

Wireless power transfer makes it easy to operate AGV's 24 hours a day!







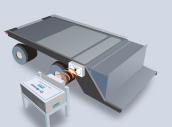
Wireless Power Transfer System for Charging Automatic Guided Vehicles (AGV)

Installation Samples











Small guide-less Auto Vehicle

D-Broad Mini



Service Robot

30mm ± 10mm (1.2" ±0.4"
Charging current does not change even if the distance changes

20A

Approx. 2kg

145x135x80mm (Excluding protrusions)

Approx. 2kg

170x45x100mm (Excluding protrusions)

High-efficiency wireless power transfer system can be mounted on all types of AGVs (Automatic **Guided Vehicles**)

Under-cart AGVs

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	Distance between the power
	transmitting and power receiving coil units

	AGV stop position misalignment allowable range(In the traveling direction)	Charging current does not change even if the position deviates by \pm 10mm (\pm 0.4")					
	Operating temperature range	0-40					
Common to all units	Operating humidity range	20-80% (No dew condensation)					
	Storage temperature range	-20-55					
	Storage humidity range	20-80% (No dew condensation)					
	maintenance cycle	7 years (Aluminum electrolytic capacitor, fan, semiconductor parts)					
	Number of phases	Single-phase					
	Rated input frequency	50/60Hz					
	Rated input voltage	200/220V±10					
Power transmitting unit	Rated input power	1.2kW					
unii	Required power supply capacity	1.4kVA					
	Weight (W×D×H)	Approx. 5kg					
	External dimensions	340x230x140mm (Excluding protrusions)					
Power	Weight (W×D×H)	Approx. 2kg					
transmitting coil unit	External dimensions	170x45x135mm(Excluding protrusions)					
	Maximum charging voltage	30V					

Maximum current

Weight (W×D×H)

External dimensions

Weight (W×D×H)

Precaution for	or U	se
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Power receiving coil unit

Use this system in places where not contacted by water.

Use this system in places where not exposed to direct sunlight.

Do not place metallic objects between the power transmitting and receiving coils.

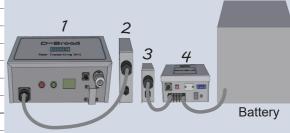
Use the system as a complete set. (This product cannot be combined with wireless power transfer systems of other manufacture.) Permission is required for installation because this equipment uses high frequencies (when installed in Japan).

TOYOTA TSUSHO AMERICA, INC.

Options

Cable	Line up	Notes
Cable 1	(2m optional cable)	① Power transmitting unit ⇔ ② Power transmitting ()
Cable 2	1m cable included as standard	(③ Power receiving ⇔ ④ Power receiving oil unit)
	Round terminals M6 (1m,2m)	(4) Power ⇔ ⑤ Battery)
Cable 3	Round terminals M8 (1m,2m)	receiving unit
Cable 3	D1 plug connector (1m,2m)	•
	SB50 connector (1m)	•

Configuration



<i>1</i> Power transmitting unit ·····	1	uni
2 Power transmitting coil unit(includes 1m cable for connecting to power transmitting unit)	1	uni
${\small 3 \ Power \ receiving \ coil \ unit \ \cdots \\ (includes \ 1m \ cable \ for \ connecting \ to \ power \ transmitting \ unit \)}$	1	uni
4 Power receiving unit · · · · · · · · · · · · · · · · · · ·	1	uni

Looking for More Information?

External dimensions **Product specifications and design are subject to change without prior notice