

Wide lineup



AGV 120W~1kW RC5600 / 1000



electric towing vehicle 600W~2kW



electric forklift 2kW

No,1



FA equipment manufacturer T

Conveyance equipment manufactuer M

Equipment manufacturer Y

market share in the wireless charging industry

plenty of Applications



auto parts manufacturer G



Collaborative robot manufacturer D



Electronic equipment manufacturer B



AGV manufacturer S



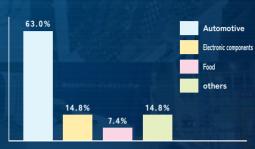
AGV manufacturer A

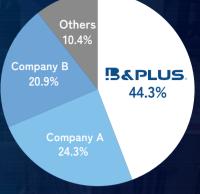


Specialized machine manufacturer Y



Among the market research on wireless charging systems for AGV, achieved No.1 sales volume share in 2020 in the global Japanese market.





*resarched by Fuji Kejzaj Co. 1 td

This is PLUS



Reduce the burden of battery replacement

Eliminates the need for frequent battery replacement, greately reduce the number of manual replacement and maintenance to by also reducing a spare battery inventory, operating costs or inventory can be reduced.



Realize 24 hour continuous operation

By automating battery charging, you can operate 24 hours a day 365 days a year without the need for battery replacement.



Less maintenance operations

Reduces the possibility of accidents such as battery drop and short circuit, and simplifies maintenance management to do. Maintenance -related issues such as wear, disconnection, and short-circuiting of plugs that are connected each time charging. It also helps to reduce troubles that occur.



Prevent battery deterioration

Using the loading and unloading time, our product charge the battery little by little for each cycle. Repetition of shallow charging and discharging reduces deterioration of the battery and leads to linger life.



Free charging simulation and 4 easy steps to installation

We will check the current situation and provide a free simulation of what would happen if you went wireless. We will make the best proposal for your system. The system implementation will be carried out smoothly in 4 steps.

- 1 Checking the operational status Measuring current consumption
- 2 Simulation
- 3 Product quate
- 4 delivery start of operation

BAPLUS

wireless unique charging advantages output power 600w **120**w



Overshelming lineup

In addition to a wide range of product lineups ranging from 120W to 2000W to suit various charging situations, we have developed a variety of product groups that meet customer needs and are used in a variety of situations.





low-floor type AGV



Extremely small Charging unit



Charging unit

Power supply unit

Overwhelmingly compact design

The RCS series has a compact system configuration, from the power supply unit to the charging unit, taking into consideration installation and mountability. In particular, the palm-sized charging unit is the smallest in the industry even with a high capacity output of 1kW. It can also be installed on small AGVs.



High environmental resistance with IP65 certification

The charging head, which is filled with resin inside, has high protection properties and is maintenance-free. Dustproof and waterproof performance is ensured, allowing stable operation over long periods of



Fast startup Start charging quickly

Just by facing each other, the heads instantly recognize each other and start charging automatically. The time it takes to start charging is a whopping 1.3 seconds. *B&PLUS' unique technology does not require any separate sensors.

*Actual value when using RCS600



Charging unit with zero battery consumntion

The charging unit can be powered only by wirelessly transmitted electricity, so it does not consume the vehicle's battery. Since electric power can be used only for driving, it also contributes to improving operating efficiency.



Small cable diameter generates less heat

B&PLUS' RCS series has a special control system that uses high voltage and low current, making it possible to minimize heat generation. Therefore, it is possible to suppress the influence on peripheral devices and the temperature rise within the system.



External signal output and battery detection possible

It is possible to output signals to the outside from the LED display of each power supply/receiver unit and the D-sub connector. By connecting to an indicator light, etc., you can quickly check the charging status and the occurrence of errors.



Support battery selection!

Set sales is possible



lead batteries and thium-ion batteries.

We also accept inquiries about contact-type charging. Please feel free to contact us

>> Notes on using wireless charging equipment

- O This product, which is one of those high frequency utilization equipment of Radio Law. In the case of using in Japan, please apply for a permission application for high frequency utilization equipment permission to Ministry of Internal Affairs and Com
- O For the control communication device that is installed in the product, there is no need for (diploma) radio station authorization of the Minister as it corresponds to a weak radio station (weak radio
- O However, please be careful when operating it as it may affect electronic devices (sensor devices) and medical devices (pacemakers, etc.).

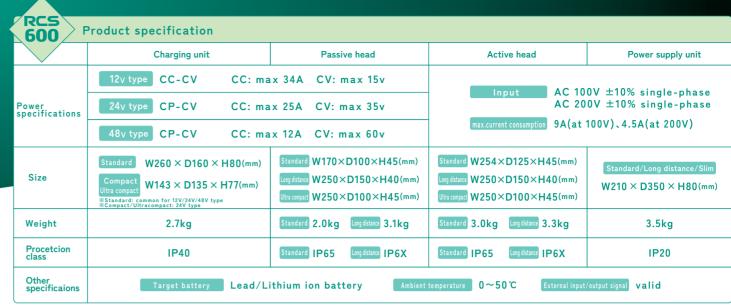
Ideal for small and medium-sized AGV Compatible with small charging units for further space savings



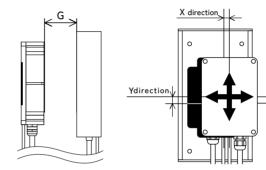
	AGV (Vehi	cle) side	Charging station side			
	Charging unit	Passive head	Active head	Power supply unit		
12V type Maximum usidar current 34A 24V type Maximum output current 25A	Standard (normal open) Standard (normal open) Standard (normal close) Old Standard: RCS600B-CA24 (normal close) Compact (normal close) Ultra compact: RCS600S-CA24 Ultra compact: RCS600S-CA24-L2	Standard: RCS600-CH-015 Long distance: RCS600-CH-L-015 Low filor model: RCS600-CH-L2-015	Standard: RCS600-AH-005 Long distancs: RCS600-AH-L-005 Low floor model: RCS600-AH-L2-005	Standard: RCS600-AC Environmental resistant type with standard head : RCS600NF-AC Environmental resistant type with long-distance head : RCS600NF-AC-L Low floor model: RCS600-AC-L2		

*If you have selected a low-profile head, please also use a low-profile unit. *Head cable length is standard 1.5m for passive head and 0.5m for active head (3m for others). *Charging units are available with normal open and normal close type. Please contact your sales representative for details

The definitive version of compact wireless charging!

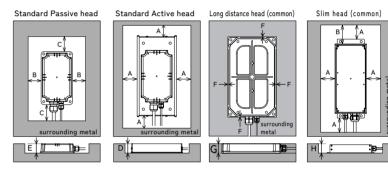


Transmission distance and center off-set between the heads



	G	X	Y
Standard head	0~20mm	±10mm	± 15mm
Long distance head	20~40mm	±10mm	± 20 mm
Ultra compact head	20~40mm	±10mm	± 20 mm

Influence of surrounding metal



	Α	В	С	D	Е	F	G	Н
Standard head	45 _{mm}	57.5 _{mm}	87 _{mm}	46 _{mm}	45 _{mm}	-	-	-
Long distance head	-	-	-	-	-	0*	40 _{mm}	-
Ultra compact head	50 _{mm}	65mm	-	-	-	-	-	45 _{mm}

^{*}The long-distance head is not affected by surrounding metal and can be installed surrounded by metal.



Mounting bracket

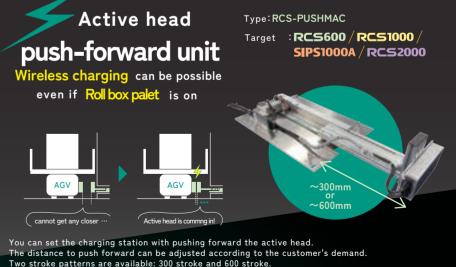
Assembly type

Target : RCS600 / RCS1000 / SIPS1000A / RCS2000

This is a bracket that fixes the power supply unit/ active head. The mounting position can also be adjusted forward and backward and up and down. It is also possible to install a power supply unit on the back. We will send you a complete set of parts, so you will have to assemble it yourself

for standard power supply unit	RCS-STAND-01
for environmental resistant type power supply unit	RCS-STAND-02
for ultra compact head type	RCS-STAND-03





Is it okay to get caught durign pushing forward?





Large capacity yet compact Build an optimal charging system with flexible head configuration

1kW wireless charging system



			TOTAL NAME OF THE PARTY OF THE			
	AGV(V	'ehicle) side	Charging station side			
	Charging unit	Passive head	Active head	Power supply unit		
Maximum output current 34A	Standard : RCS1000B-CA24 (normal close) (Nd standard : RCS1000-CA24 (normal close) (Nd Standard : RCS1000S-CA24 (normal close) (Nd Standard : RCS1000D-CA24 (normal close) (Nd Standard : RCS1000B-CA48 (normal close) (Nd Standard : RCS1000B-CA48 (normal close) (Nd Standard : RCS1000S-CA48 (normal close) (Nd Standard : RCS100S-CA48 (nor	Standard: RCS1000-CH-015 Long distance: RCS1000-CH-L-015	Standard: RCS1000-AH-005 Long distance: RCS1000-AH-L-005	Standard: RCS1000-AC Long distance: RCS1000-AC-L Superior environmental resistant: RCS1000NF-AC		

*Head cable length is standard 1.5m for passive head and 0.5m for active head (3m for others *Charging units are available with normal open type and normal close type. Please contact your sales for detail

Double head type charging unit

Charging unit that can connect 2 passive head to 1 unit.

Ideal when you want to install charging stations in different deal when you want to install charging stations in different directions on the AGV driving route, or when charging stop points are slightly shifted. By supporting flexible placement, the degree of freedom in station installation is expanded. Additionally, by replacing the charging unit, you can add a passive head to your existing charging system. Even if there are two heads, there is only one charging unit, or control with AGV is possible as before. so control with AGV is possible as before.

Target Standard head x2 Long distance head x2



24V type Type: RCS1000D-CA24 Target: RCS1000 24v / SIPS1000A

[Example 1] Use an active head in a different position than the first head

[Example 2] Soon after stopping in lane A, stopping again at lane B charging will be done at either stop position.



PATLITE Set

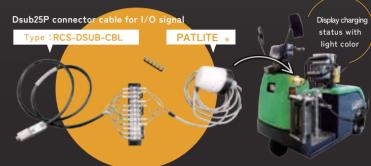
Type: RCS- PTL-SET01

The "ready", "charge", "end" and "error" signals displayed by the LEDs on the side panel of the power supply unit/charging unit can be output to the PATLITE. You can monitor the charging status from a distance without having to get close to the unit.

There is no need to select a patrol light from the beginning

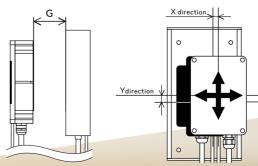
It can be difficult to find a suitable product among a large number of indicator lights. The current consumption and voltage of the PATLITE selected by B&PLUS have been confirmed, so you can save yourself the trouble of selecting one and use it with confidence.

Target: RCS600 / RCS1000 / SIPS1000A / RCS2000





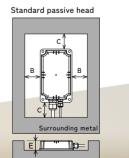


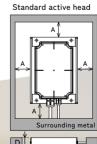


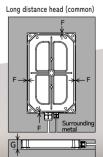
		Ydirection V	
	G		

	G		
Standard head	0~15mm	±10mm	±10mm
Long distance head	20~40mm	± 10 mm	± 20 mm*

Influenece of surrounding metal







			С	D			G
Standard head	100mm	100mm	100 _{mm}	45 _{mm}	45 _{mm}	-	-
Long distance head	-	-	-	-	-	10mm*	40 _{mm} *

Achieves high-speed charging with the highest output* in B&PLUS history.

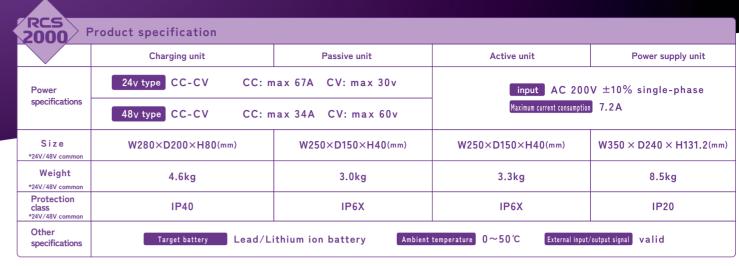
RCS2000



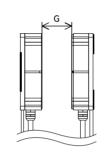
	AGV(V	ehicle) side	Charging station side			
	Charging unit Passive head		Active head	Power supply unit		
24V type Maximum output curren 67A	RCS2000-CA24	RCS2000-CH-015	RCS2000-AH-005	RCS2000-AC-B24		
48v type Maximum output curren 34A	RCS2000-CA48	RCS2000-CH-B48-015	RCS2000-AH-B48-005	RCS2000-AC-B48		

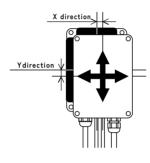
*Head cable length is standard 1.5m for passive head and 0.5m for active head (3m for others) *The charging unit is available with normal open type. Please contact your sales for details

Easily and efficiently charge and maintain large AGVs, electric towing vehicles, and electric forklifts.



Transmission distance and center off-set between the heads



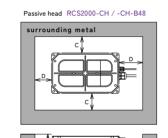


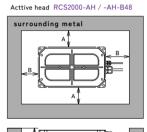
distance (G)

 $10 \sim 25 \, \text{mm} / 2 \, \text{kW} \quad 25 \sim 30 \, \text{mm} / 1.5 \, \text{kW}$ 30~35mm / 1.0kW 35~45mm / 500W

X direction ± 10 mm Y direction ± 20 mm

Influenece of surrouding metal





	Α	В	С	D	Е	F
Active head	0 _{mm}	0 _{mm}	-	-	40 _{mm}	-
Passive head	-	-	20 _{mm}	40 _{mm}	-	40 _{mm}

Procection filter

for power supply unit

A dustproof filter kit that protects the RCS2000 series power supply unit, which is equipped with an air cooling fan as standard. Protect your power supply unit by replacing it regularly

RCS-FILTER02	Filter	Polyester/vinylon 2.5mm thickness		
RCS-FILTER02-SET	guard, cover	Resin (PPE+PS)		

*Please check the filter regularly and replace it if it is clogged or deteriorated. A dirty filter may cause malfunction or fire.

Type: RCS-FILTER02 / RCS-FILTER02-SET Target: RCS2000

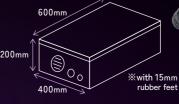
Procection box for power supply unit

Block the suction of dust floating in the air!

This box is designed to control the suction of foreign substances floating around in the factory, such as dirt, dust, and oil mist. If you are using the power supply unit in a location where foreign objects are likely to fly around, we recommend storing it in a box.







Target: RCS2000





Wireless power supply system for AGV Option list

Sries

> RCS600 RCS1000 SIPS1000A RCS2000

01 Filter for power supply unit A protective filter for the air intake vent on the side of the power supply unit. Please use it by pasting it on the two intake ports. Protects the inside of the device from dust and oil mist. If the surface becomes black, we recommend replacing it with a new filter. 600 1000 1000A There is one air intake on each side of the power supply unit. Please paste it on both. RCS-FILTER01 *As a guideline for when to replace it, we recommend replacing it before the opening of the intake part is no longer visible. Filter: 24 pieces/Filter mounting tape: 8 pieces A protective filter for the air intake vent on the side of the power supply unit. Use by pasting it on the air RCS-FILTER02 (Filter) intake to protect the inside of the device from dust and oil mist. We recommend replacing it when the RCS-FILTER02-SET (Filter, guard, cover set) surface becomes black. This connector cable connects the Type C connector to the charging unit and the Type A connector to Cable to write charging settings to a compact charging unit the PC, allowing you to change the parameter settings of the charging unit. The software can be RCS-DATA-CBL03 (cable length 2m/TypeA-TypeC) downloaded for free from the website. RCS-DATA-CBL04 (cable length 2m/TypeC-TypeC) Connector cable for input/output signals A cable that can input and output signals to the outside. Used to capture signals to external devices such as indicator lights and PLCs. Signals such as charging, charging completed, and errors can be input and output. *Can be connected to each unit. RCS-DSUB-CBL 600 1000 1000A 2000 This is a cable that connects Battery connection cable 600 1000 1000A the charging unit and battery Available for M6 and M8 RCS-CBL-M8-01 (1m) RCS-CBL-M6-01 (1m) terminals, allowing you to M6terminal M8terminal RCS-CBL-M6-02 (2m) RCS-CBL-M8-02 (2m) select the cable len cable RCS-CBL-M6-01-C (connector type 1m) RCS-CBL-M8-01-C (connector type 1m) according to the AGV specifications. 2000 This is a cable that connects the charging RCS2000-CA48 M8terminal RCS2000-CA24 unit and battery. Cable length can also be selected. The model differs depending on the cable RCS-24CBL-M8-01 (1m) / 02 (2m) RCS-48CBL-M8-01 (1m) / 02 (2m) unit. Please check the unit you are using Battery series/parallel connection cable 600 1000 1000A 2000 This is a cable that connects batteries RCS-BTCBL-M8-003 (0.3m) M6 terminal cable RCS-BTCBL-M6-003 (0.3m) M8 terminal cable 06 Thermistor cable 600 1000 1000A 2000 Wire between the charging unit and the battery, and detect the battery temperature with the thermistor RCS-THERM1.5 (1.5m) / RCS-THERM2.5 (2.5m) / RCS-THERM-C (connector type 2.5m) Active head RCS600AH-SIR-*** RCS600AH-PWR-*** RCS1000AH-SIR-*** RCS1000AH-PWR-*** RCS2000AH-SIR-*** RCS2000AH-PWR-*** Robot cable 1.5m / 2.5m 1.5m / 2.5m 1.5m / 2.0m / 2.5m 1.5m / 2.5m 1.5m / 2.5m / 3.0m 1.5m / 2.5m / 3.0m Active head RCS600AH-PWN-*** RCS1000AH-PWN-*** Standard cable 1.5m / 2.5m 1.5m / 2.0m / 2.5m Passive head RCS600CH-SIR-*** RCS600CH-PWR-*** RCS1000CH-SIR-*** RCS1000CH-PWR-*** Robot cable 1.0m / 2.0m / 3.0m 1.5m / 2.5m / 3.5m 1.5m / 2.5m / 3.5m 1.0m / 2.0m / 3.0m Passive head RCS1000CH-PWN-*** RCS600CH-PWN-*** Standard cable 08 AC power cable and adapter If the power cable diameter you are using is thicker than 2sq, please use this set to relay and connect. The relay adapter supports cable diameters from 2sq to 3.5sq. (Relay adapter model: WA3420K) RCS-CBL02 09 Stand for fixing power supply unit/active head (assembled type) 600 1000 1000A 2000 Active head push-out unit stand to secure the power supply unit and active head. The mounting position can also be adjusted forward and backward and up and down. It is also possible to install a power supply unit on the back. This product is assemble-your-RCS-STAND-01 (for standard unit) / RCS-STAND-02 (for superior environmental resistant unit) RCS-STAND-03 (for power supply unit for low floor type AGV) 10 Mounting bracket for small charging unit A mounting bracket dedicated to small charging units Mounting screws are already installed on the main body side of the small charging unit. (1 set of 2 pieces) **RCS-BRACKET-S** 600 1000 1000A 11 Output signal display PATLITE® set A set includes an input/output signal cable (RCS-DSUB-CBL), a terminal block, and a patrol light (NE type multi-color model). You can use it as is without having to select any equipment. It can also be connected to a power supply unit and can be used to RCS-PTL-SET01 600 1000 1000A 2000 visualize the situation. Please refer to the instruction manual for details. Active head extrusion unit Please use this when you want to push the active head forward and install a charging station. RCS-PUSHMAC 600 1000 1000A 2000

🖪 Contact



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