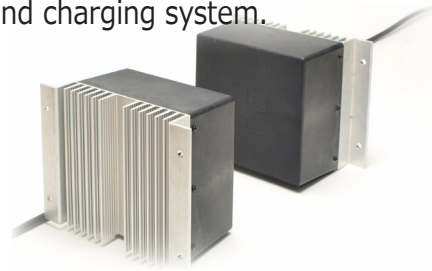


*Just by facing each other*

# Wireless Power Supply/ Power Charge

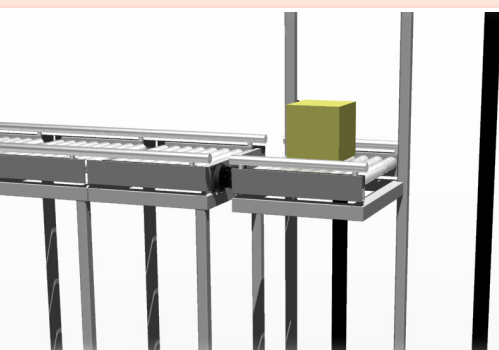
Remote Power supply system helps from complicated wiring such as rotating, mounting/dismounting and conveyance equipments by wireless power supply and charging system.



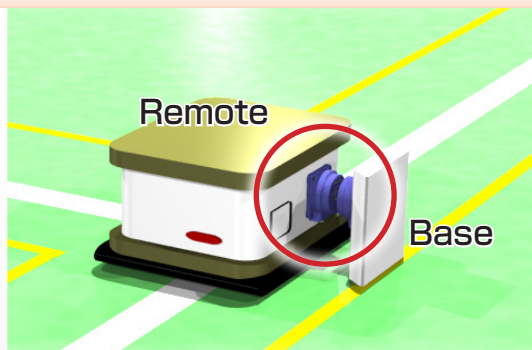
• Various lead battery from different companies can be used!

## Example of the application

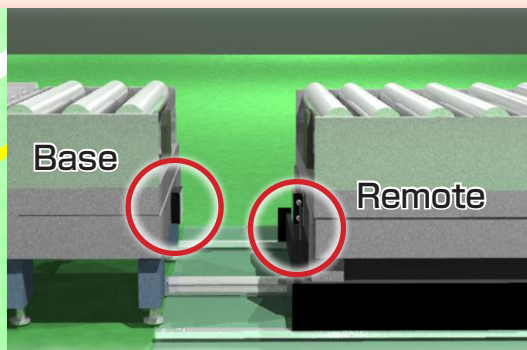
By changing the equipments to wireless power supply, it resolves the cable troubles!!



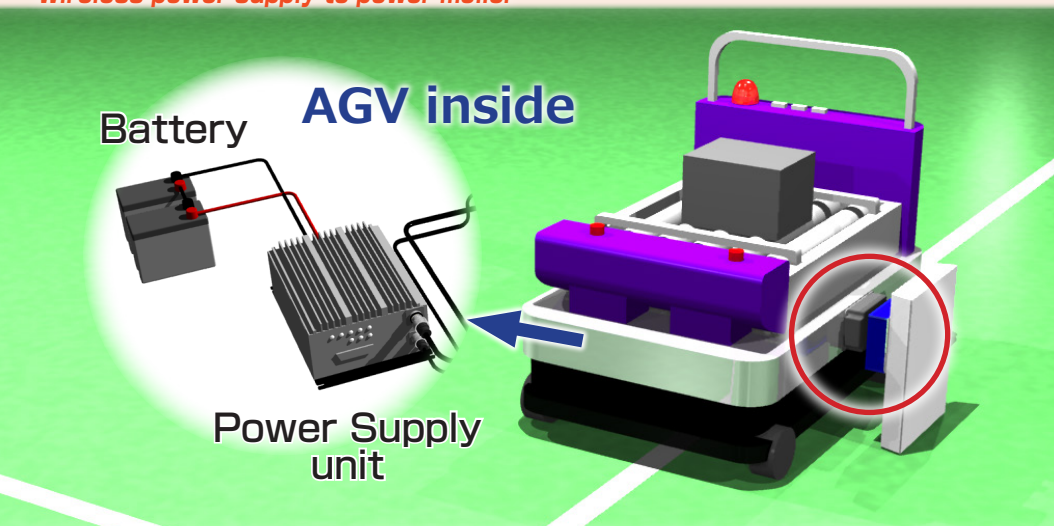
**Lifter :**  
Wireless power supply to power moller



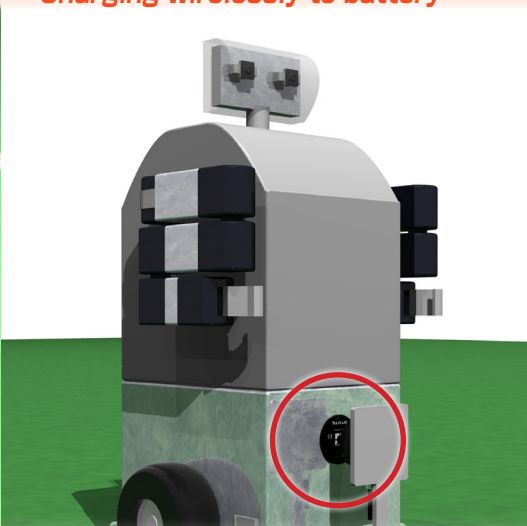
**AGV: Charging wirelessly to battery**



**Power moller :**  
Charging wirelessly to battery



**AGV :Charging wirelessly to battery**

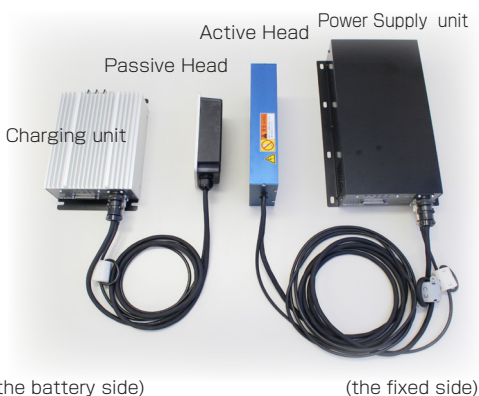


**Robots :**  
Wireless charging of humanoid robots

# Product lineup • Charging

## Charging(Lead • lithium ion battery)/ 600W

### Common specifications



(the battery side)

(the fixed side)

Type code	Active Head : RCS600-AH Power Supply Unit : RCS600-AC Passive Head: RCS600-CH Charging Unit : RCS600-CA_ _
Charging method	CC/CV(constant current·constant voltage)
Supply voltage / Current consumption	AC90~AC220V Single-phase 50/60Hz / 9A(100V), 4.5A(200V)
Transmission range/ Center offset	0~20mm / ± 10 mm in the X axis direction and ± 15 mm in the Y axis direction
Size(mm)	RCS600-AH : 254x125x46, RCS600-CH : 170x100x45 RCS600-AC : 350x210x80, RCS600-CA_ _ : 260x160x80
Weight	RCS600-AH : 3.0kg(Cable3m), RCS600-CH : 2.0kg(Cable1.5m) RCS600-AC : 3.3kg, RCS600-CA_ _ : Reference below
Operating temperature	0~50℃
Protection class	Each head:IP65(indoor base station) RCS600-AC:IP20(indoor base station)RCS600-CA_ _:IP40(indoor base station)

Selectable charging zone and distance between heads! Selection according to the application is possible!

Each charging unit type code	❶ RCS600-CA24	❷ RCS600-CA12	❸ RCS600-CA48
Output voltage	Max.30V	Max.15V	Max.60V
Output current	Max.20A	Max.34A	Max.10A
External input	Charging start signal		
External output(LED)	Ready, Charge, End, Error, E1 ~ E3		
Operating temperature/Protection class	0...50℃ / IP40(indoor base station)		
Weight	2.7kg	2.8kg	2.7kg
Protection circuit (Battery)	Battery high / low temperature protection,Overvoltage protection,Overcurrent protection		

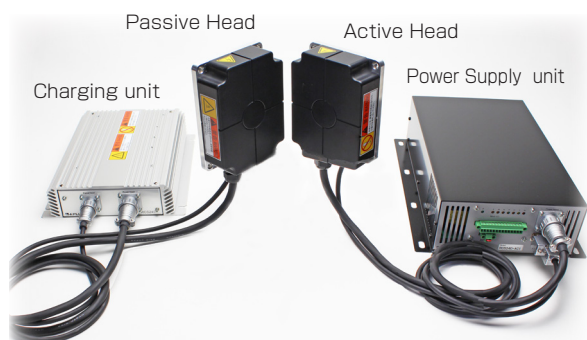
Long distance heads are also available!

Type code	Active head : RCS600-AH-L Passive head : RCS600-CH-L
Transmission range	20mm~40mm
Protection class	IP6X(indoor base station)
Center offset	± 10 mm in the X axis direction, 15 mm in the Y axis direction

## Charging(24V lead storage battery)/30V/7A

(the battery side)

(the fixed side)

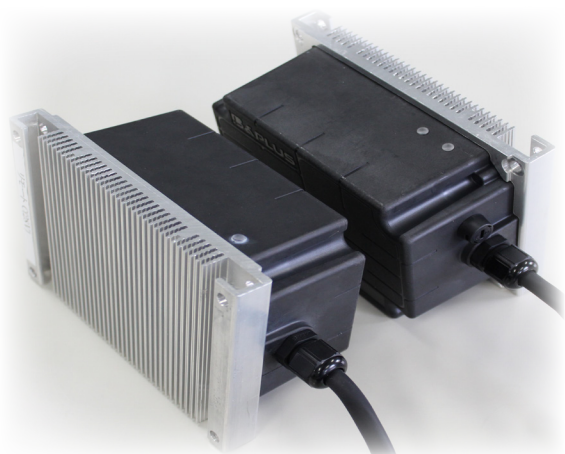


It is exclusive for 24V lead storage battery wireless Power Supply In addition to charging type, it is equipped with the functions such as a protection function and battery residual quantity monitor.

Type	Charging Supply	Head RCS240PH, Unit RCS210-PB24 Head RCS240AH, Unit RCS240-AC01
Feeding system	CCCV (constant current · constant voltage) CC : max7A/CV : max30V	
Supply voltage / Current consumption	100V AC / 200V AC / ≤ 4A	
Transmission range/Center offset	0...10mm / ≤ 10mm (A major axis, the totals of the each minor axis are less than 10mm) Passive Head Active Head	
Cooling method	Natural air cooling : charging unit / Forced air cooling : Power Supply unit	
Size (mm)	100×140×40 ※ Except for cable outlet /Receiving head ·Feeding head 188×230×50.5 : Charging unit/210×300×80 : Power Supply unit	
Weight	1300g : Each Head 1600 g : Charge unit /2700g : Power Supply unit	
Protection class	IP65 (indoor base station) : Passive Head · Active Head IP20 (indoor base station) : Charging unit · Power Supply unit	

## Charging(12V·24V lead storage battery)/14.8V8.5A • 29.0V4.3A

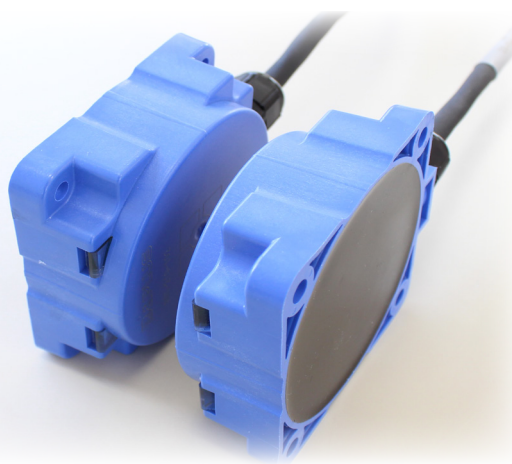
It is a charge type specialized in a 12V/24V lead storage battery. Confirm the residual valve of the battery and charge it by CCCV charge. In addition, it will shift to a float charge mode after charge.



		12V	24V
Type code	Remote	RVT-433-508-PU-01	RVT-433-404-PU-01
	Base	RVE-433-2-PU-02	
Drive voltage / current( Remote)		≤ 14.8V/ ≤ 8.5A(The voltage electric current changes by a battery voltage)	≤ 29.0V/ ≤ 4.3A(The voltage electric current changes by a battery voltage)
Supply voltage / Current consumption(Base)		24VDC ± 10% (including ripple) / ≤ 8A	
Transmission range/Center offset		0 ~ 10mm / ± 4mm	
Size (mm) Remote and Base		110 × 160 × 75 ※ Except for the cable outlet.	
Weight	Remote	Body1600g + Cable150g × 1m	
	Base	Body1600g + Cable150g × 2m	
Operating temperature / Protection class		0...+50℃ / IP65 · IP67	



## Charging(12V lead storage battery)/14.4V2A



Charge 12V lead storage battery wirelessly. Confirm the residual pressure of the battery and charge it by CCCV charge. In addition, it will shift to a float charge mode after charge. Able to simply charge the small battery of 12V

Type code	Remote	RVT-210-502-PU-01
	Base	RVE-210-2-PU-02
Drive voltage / current( Remote)		14.4V CV control upper limit voltage/ $\leq 2A$ CC control current
Supply voltage / Current consumption(Base)		24VDC $\pm 10\%$ (including ripple) / $\leq 2A$
Transmission range/Center offset		4 ~ 10mm / $\pm 5$ mm
Size (mm)	Remote and Base	80 × 80 × 30 ※ Except for the cable outlet.
Weight	Remote	Body280g + Cable82g × 1m
	Base	Body280g + Cable82g × 2m
Operating temperature / Protection class		0...+50°C / IP67
LED Remote/Base		While feeding: yellow While facing: green While Feeding: Overheat Yellow

## Information about the battery simulation

### 1. Simulation confirmation items

- ① Check Battery model and battery capacity
- ② Confirm running/stopping time ※ Running time/stop time per cycle
- ③ Confirm consumption current  
Running, stopping and resting time and each current consumptions.
- ④ Can you charge while paused? Does it stop without charging?
- ⑤ Operating hours per day  
Confirm the operation status of AGV at the time of starting/ending/  
lunch break/immediate and whole day

### 2. AGV current consumption measurement

We will measure the current consumption using the current measurement logger with the AGV under consideration.



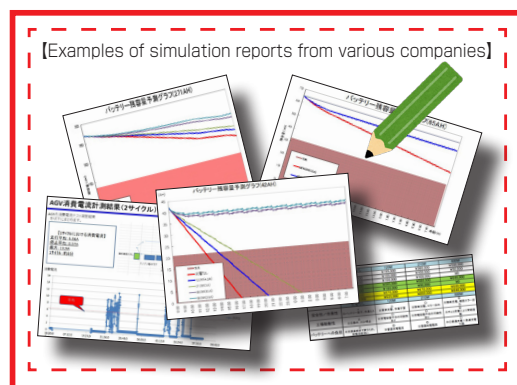
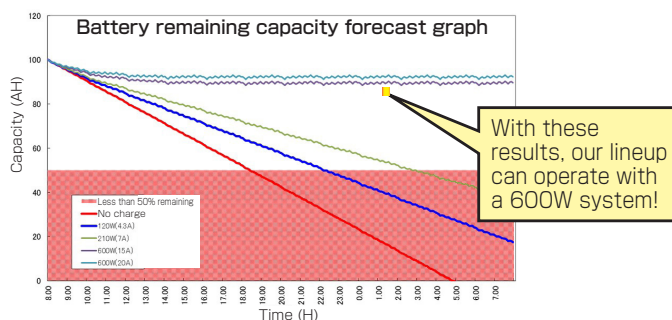
Current measurement logger



Attach current measurement logger to battery

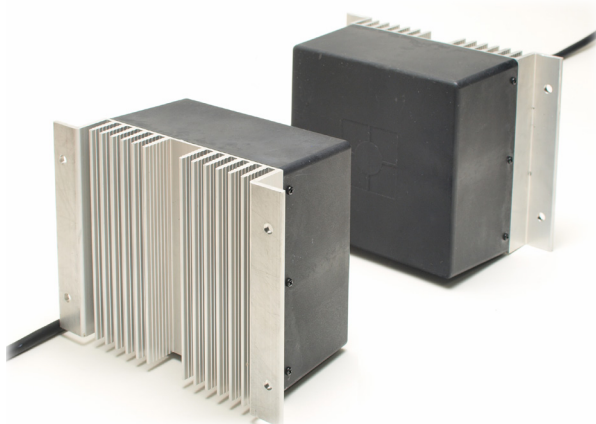
### 3. Simulation report

Report the results immediately with our special simulation software! A report can be submitted in about one week!



## Product lineup • Power supply

### Power supply/24V5A



Big capacity power Mollar or motor is used as a driving power. In addition, it can be changed to a 24V charge type just by changing the facing head.

Type code	Remote	RVTA-411-25-PU-01
	Base	RVEA-411-3-PU-02
Drive voltage / current( Remote)		24V $\pm 2V$ / $\leq 5A$
Supply voltage / Current consumption(Base)		100VAC $\pm 10\%$ / $\leq 3A$
Transmission range/Center offset		4 ~ 10mm / $\pm 4$ mm
Size (mm)	Remote and Base	150 × 200 × 103 ※ Except for the cable outlet.
Weight	Remote	Body3000g + Cable100g × 1m
	Base	Body3000g + Cable100g × 2m
Operating temperature / Protection class		0...+50°C / IP65
LED (Base)		Power, INZONE

## Power supply/24V2A

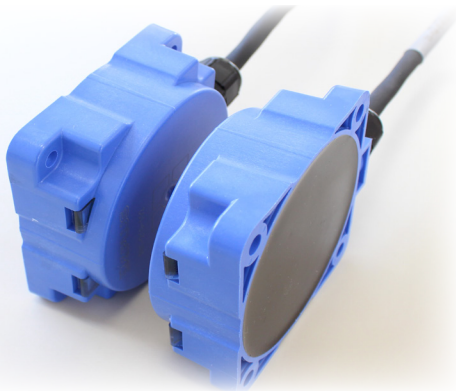


By the power Mollar, motor drive and the supporting power supply, it feeds 24V2A wirelessly .It becomes an intermittent oscillatory wait mode at the time of the non-facing.

Type code	Remote	RVT-211-22-PU-01
	Base	RVE-211-2-PU-02
Drive voltage / current( Remote)	24V ± 1.5V DC / ≤ 2A	
Supply voltage / Current consumption(Base)	24V ± 5% / ≤ 4A	
Allowable axis deviation and drive current at transmission range	Transmissionrange	Center offset
	4...9mm	± 5mm
	6...8mm	± 3mm
Size (mm)	Remote and Base	90 × 90 × 45 ※ Except for the cable outlet.
Weight	Remote	Body600g + Cable120g × 1m
	Base	Body620g + Cable120g × 2m
Operating temperature / Protection class	0...+50℃ / IP67	

•Inrush current limiting units are available depending on the situation of the customer's equipment.

## Power supply/12V2.5A



It is a power supply type specialized in a drive apparatus of 12V. It is lower cost type than 24V and is the product that it is most suitable for 12V drive.

Type code	Remote	RVT-210-102-PU-01
	Base	RVE-210-2-PU-02
Drive voltage / current( Remote)	12V ± 5% / ≤ 2.5A	
Supply voltage / Current consumption(Base)	24VDC ± 10% (including ripple) / ≤ 2A	
Transmission range/Center offset	4 ~ 10mm / ± 5mm	
Size (mm)	Remote and Base	80 × 80 × 30 ※ Except for the cable outlet.
Weight	Remote	Body280g + Cable82g × 1m
	Base	Body280g + Cable82g × 2m
Operating temperature / Protection class	0...+50℃ / IP67	
LED Remote/Base	In feeding: yellow In facing: green / In Feeding: Lighting	

## Power supply/24V1A



Bracket type code : B-PLUS-BLOP=01

It is a compact remote system that can supply 1A despite its small size.Suitable for powering LEDs and small motors.We also sell convenient brackets with special screws. Installation is possible immediately.

Type code	Remote	RVT-422-201-PU-01
	Base	RVE-422-2-PU-02
Drive voltage / current( Remote)	24V ± 1.5V / ≤ 1A	
Supply voltage / Current consumption(Base)	24VDC ± 5% (including ripple) / ≤ 1.4A	
Transmission range/Center offset	0 ~ 3mm / Refer to the instruction manual for details.	
Size (mm)	Remote and Base	45 × 45 × 25 ※ Except for the cable outlet.
Weight	Remote/Base	Body90g + Cable60g × 1m / Body90g + Cable60g × 2m
Operating temperature / Protection class	0...+50℃ / IP67	
LED Remote/Base	Green : Status LED	

## Power supply/Mating type 24V1A



Just by plugging the convex based part to concave remote part,it will wirelessly power supply . Because it is interdigitation type and small, waterproofing connection of the large electricity, 24V1A is possible.

Type code	Remote	RVTI-030-21-PU-01 (M30)
	Base	RVEI-030-2-PU-02 (M30)
Drive voltage / current( Remote)	24V ± 1.5V DC / ≤ 1A	
Supply voltage / Current consumption(Base)	24VDC ± 10% / ≤ 3A	
Transmission range	3 ~ 10mm	
Size (mm)	Remote and Base	M30, 110.5mm / M30, 110.5mm
Weight	Remote/Base	Body200g + Cable50g × 1m / Body180g + Cable50g × 2m
Operating temperature / Protection class	0...+50℃ / IP67	

## Please make sure to follow the instructions.

- When operating, please follow the instruction manual and user's guide.  
Users' s guide can be downloaded on our HP.
- Some products may to need have a permission for using high frequency in the facilities.
- Specification is subject to change without notice. Thank you for understanding.

Wireless Power Supply by  
**B & PLUS K.K.**

Mail : b-plus-usa@b-plus-kk.com  
Web : <http://www.b-plus-kk.com>