

# B&Plus, we support and realize a Wireless Power Supply!

# What is Wireless Power Supply?



Metal is not only the option tocarry electricity!
Wireless Power supply is the future technology that can be carry in the space.

Receiving coil Transmitting coil







Power Supply

## What is B&PLUS?

We are a Wireless Power Supply Company that have been continuing to develop, produce and sell for more than 30 years.

Aiming for World No.1 in the wireless power supply. We have been proven for high technology and continuing to increase the variety of the product line up.





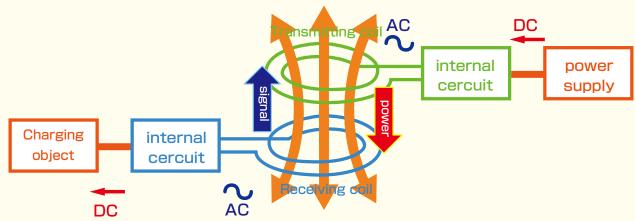




Not only our wireless feeding technology but also the integration design of the Qi standard and support realization of the wireless feeding to the customers.

# **B&PLUS Wireless charging system**

#### Wireless power supply system



Our Wireless Power Supply is an inductive coupling method.

The electricity of direct current input into the transmission department is converted into interchange magnetic force by going along the internal circuit and coil, and the electricity magnetic force is an anti-opposite side receives and reach the coil of the electric part.

Interchange magnetic force realizes wireless feeding in what is converted into electricity of the direct

#### Advantage of the Wireless charging system







#### Comparison with other methods

	Transmitted	Size	Frequency band	condition			Dis-	Supply	Simultaneous
	power			Partition	Noise	Dirt		efficiency	Communica- tion
Wireless Power Supply (Electromagnetic induction)	0.06 ~ 1KW	φ12~	less than 100KHz	0	0	0	Δ	0	0
Resonance method	less than 10KW	□50cm~	LF ~ HF band	0	$\triangle$	0	0	$\triangle$	$\triangle$
Microwave wireless	1KW	□ 10cm~	Microwave band	×	0	×	0	×	$\triangle$

## **About Qi standard**

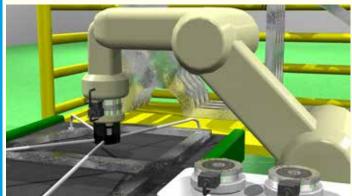
#### [ What is Qi Standard ...? ]

Wireless Power Supply that is the standard of the WPC(Wireless Power Consortium) and in accordance with the Qi Standards products. It can be used in different maker as long as the Qi Standard meets each products. Correspondence with charging up to 15W as of December, 2015 B&PLUS became a member of WPC from 2016.

	B&PLUS	Qi Standard		
Capacity	0.06W ~ 1KW	$0.06W \sim 15W$		
Transmission range	~ 26mm	~ 7mm		
Feeding system	Electromagnetic cou- pling type	Electromagnetic cou- pling type		
Communication	Feeding control, charge control, various outside communication	Only feeding control		

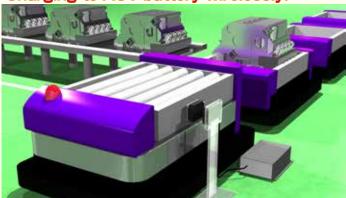
## **Results of Wireless Power Supply**

#### Grasp confirmation of the robot hand



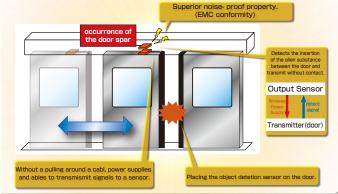
The small shape that is most suitable for a tool changer!

#### Charging to AGV battery wirelessly.



Correspondents 30 ~ 210W Smooth charging is possible!

#### Door spar alien substance detection system



Detects the insertion of the alien substance between he door and transmit it by non-contact!

#### Wireless charge to a duck robot



Anticipated in duck (organic) agricultural methods!

## Technique and the results that cultivated in an FA market

Our Wireless Power Supply technology have been used all over the world. At the factory of the major automaker. And even at the severe environment, it has been stable movement for a long term. It is wide, and there are many achievement all over the world.

### The reason why a major automaker choose our technology?



Solve the cable trouble



Improvement of the disconnection by the steering of the cable.

#### Solve of the connector trouble



Improvement of the poor contact by pin breaking or contact deterioration.

#### Reduction of the cost



Reduce the maintenance cost at the time of the trouble.

#### ■□■The development and the production of B&PLUS system■□

1,000 number of the development system Development results Production facilities Correspondence in small quantity, large variety.



Technology and knowhow for over 30 years.



EMC facilities in the company.

Highly precise coil winding machine



Board design & mounting

# Wireless power supply examination request sheet

## Please feel free to contact.

Sales department and marketing will support your request and needs.

Application being considered.		Automatic feeding to a robot		
Specifi- cations request	Method Chose one	Charging	Supply	
	When charging Chose one	Lithium	Lead	
	Manufacturer of the battery and Specification			
	Power Supply	30W or 24V/1.5A pply		
	Transmission distance and axis gap	Distance 15mm, center offset +-	5mm	
	Signal type, point, speed	signal of charge control, etc		
Operating environment		Please fill out if there are concerns about the and mechanical shock.	ambient temperature, water, oil, vibration,	
Other requests and questions				

## Contact

Name	Contact information (Cell phone)	E-mail	

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<sup>\*</sup> Infor may change the mention contents such as specifications without a notice. Thank you for understanding