Wireless power supply
Signal transmission

Product lineup

35 years of wireless Power Supply (Made in Japan)

More than **10,000 annual results, not only domestically but also internationally.**

Products line up is the world top-class

Wireless power supply by

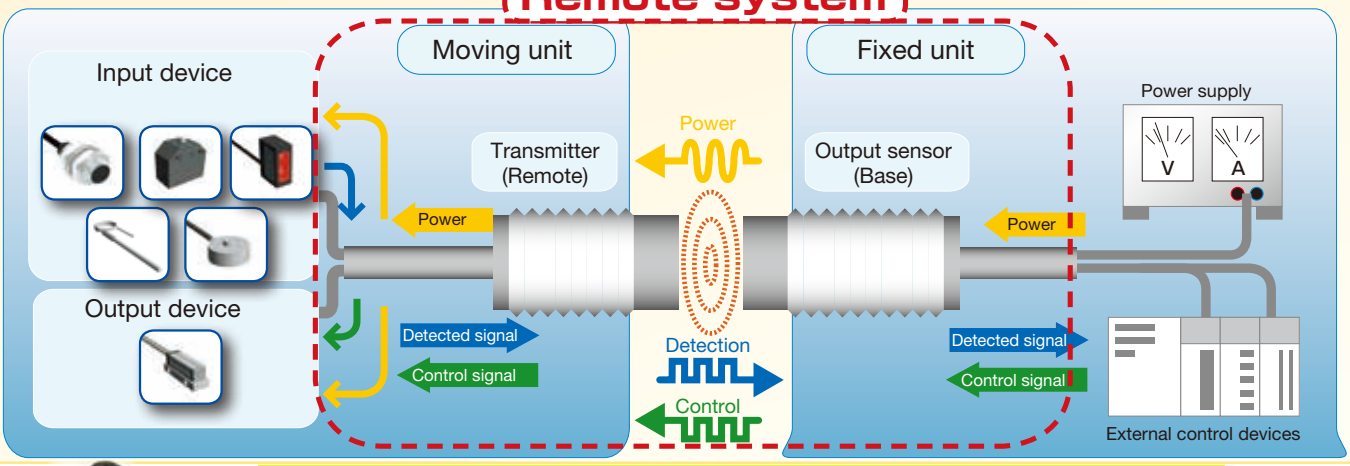
B&PLUS®

What is Remote system?

Electromagnetic coupling type • Many related patents

Remote System is a system that transmits the power and the signal wirelessly at the same time.
Composed of an output part (base part) and a transmission part (remote part). Movable side connects to proximity, optical sensors and temperature sensors, such as output equipment and solenoid valve. Power supply and control equipment to the fixed side, and controls input/output wirelessly.

Remote system



I see.....  Great!!

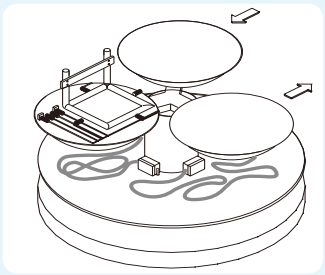
Example of the application

Rotation

Turntable

◆ Contiguous 3 processes

· Each process confirms positioning by Proximity sensor Using 4each



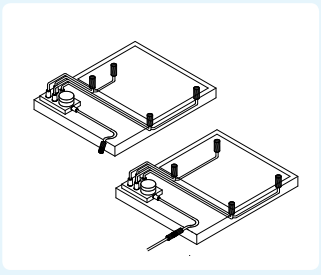
Problem
- Cable breakage from stress.
- Time Loss caused by inversion

Mounting/dismounting

Welding jig

◆ Work sitting confirmation in the exchange jig

· Using Proximity switch and confirms positioning.



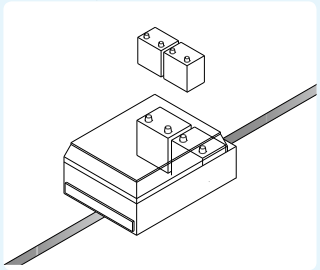
Problem
- Needs to change by man hand for jig change.
- Connector has no waterproof and no protection against dust resistance

Conveyance

Automatic guided vehicle (AGV)

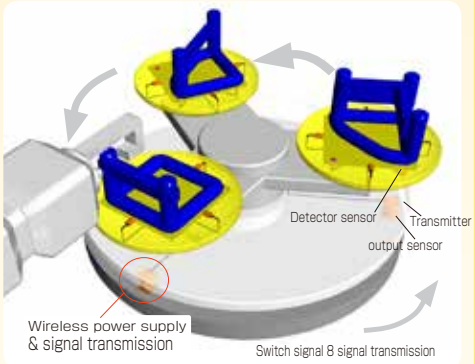
◆ Automated battery charge

· The battery of AGV units are partly charged during the waiting time at stops.

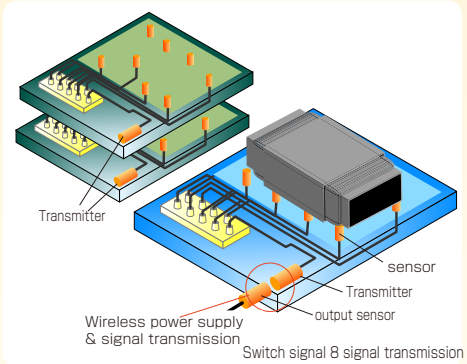


Problem
- A worker need to change battery. Weight of the battery burdens the worker.
- Needs to care for the spark, by the automatic charge using the probe, a terminal is oxidized.

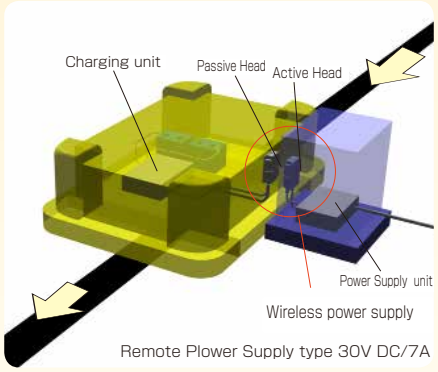
When you change to Remote system....



Solution!
- ○ No Cable for the movable side and no disconnection
- ○ Only turns in one direction and improves efficiency
- ○ By installing a remote sensor in the axis, can be substituted for the collector ring .



Solution!
- ○ No need to mount and dismount the connector and possible to change jig automatically
- ○ Unnecessary of maintenance of the connector.
- ○ Unnecessary for the connector to plug in and out.
- ○ Waterproof and available using in a processor.



Solution!
- ○ Can be charged little by little and no need to change the battery while operating.
- ○ Safe because of non contacting point.
- ○ No more heavy battery

Features and security protection class.

Signal transmission is possible even in a bad environment that is hard to prevent from water, even with glass or the resin partitions.
The product supports protection against dust, waterproof structure such as IP67. (There are some exceptions.)

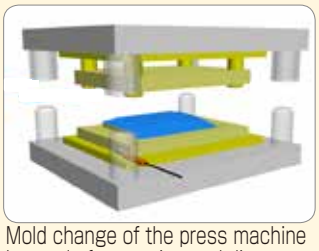
Various product lineup

Remote sensor system

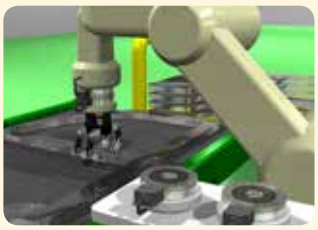
Wireless Power supply+Input signal (Switch or Analog)

Power supplies to various sensors wirelessly and operates various sensors and transmits and detects signal of the sensors. As for the sensors, jig,an index table, a conveyance palette, proximity sensor and optical sensors can be used. When need to have heat control equipment and die, Analog Signal Transmission type is also available.

～ Application ～



Mold change of the press machine Instead of mounting and dismount the connector.



Hold confirmation of the robot hand.

Temperature control of the Mixing machine.

■ Switch signal transmission

Wireless Power Supply+ON and OFF signal of the sensor

■ for DC 3-wire sensor

Power supply:
12VDC/～200mA
24VDC/～300mA
Signal : 1,4,8 signals.

■ for DC 3-wire sensor (Compact shape)

Power supply:
12VDC/～230mA
Signal : 4,12signals.

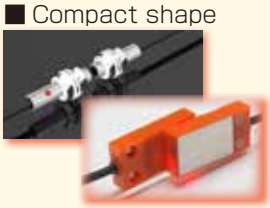
■ for DC 2・3-wire sensor (Terminal type)

Power supply:
DC 2-wire : 22VDC/5mA
(per 1 signal)
DC 3-wire : 12VDC/～150mA
24VDC/～550mA
Signal : 8,16signals.

■ for DC 2-wire sensor

Power supply:
12VDC/5mA (per1 signal)
Signal : 1,2,4,8,15 signals.

■ Compact shape



Power supply:
M8 : Mechanical limit switch
Flat : 12VDC/5mA
(per 1 signal)
Signal : 1signals.

■ for DC 2・3-wire sensor (Anti-weld slag type)

Power supply:
DC 2-wire : 12VDC/5mA
(per 1 signal)
DC 3-wire : 12VDC/～30mA
Signal : 1,2,4,8,15 signals.

■ for DC 2・3-wire sensor (Slot shape)

Power supply:
DC 2-wire : 20...26VDC/5mA
(per 1 signal)
DC 3-wire : 12VDC/～50mA
Signal : 8signals.

■ for DC 2-wire sensor (Ring shape)

Power supply:
12VDC/5mA
(per 1 signal)
Signal : 15signals.

■ for DC 2-wire sensor (High temperature type)

Power supply:
12VDC/5mA
(per 1 signal)
Signal : 8signals.

■ for DC 2・3-wire sensor (Compact shape)

Power supply:
DC 2-wire : 12VDC/6mA
(per 1 signal)
DC 3-wire : 12VDC/～
150mA
Signal : 12signals.

■ for DC 3-wire sensor (Linear type)

Power supply:
12VDC/～200mA
Signal : 8 signals.

Power supply:
24VDC/～1A
Signal : 12signals.

■ Analog signal transmission

Transmits to Thermocouple, Resistance thermometer, load cell type sensors

■ for Thermocouple J , K

Wireless Power Supply
Power supply for temperature sensor
For Thermocouple
Thermocouple J・K:
2 signals.

■ for Thermocouple J ,K (Ring shape)

Wireless Power Supply
Power supply for temperature sensor
Ring shape
Thermocouple J・K:
2 signals.

■ Thermocouple, Resistance thermometer, Thermister (Ring shape, compact shape)

Wireless Power Supply
Power supply for temperature sensor
Ring or Compact shape
Maximum of 8 Thermocouple sensors

■ for Resistance thermometer Pt100

Wireless Power Supply
Power supply for temperature sensor
For resistance thermometer
Resistance thermometer (Pt)

■ for Analog sensor

Wireless Power Supply
20V DC/10mA
For Analog sensor
0...10V Output sensor

■ for Load cell

Wireless Power Supply
Power supply for load cell.
For Load cell
Compression load cell

Remote Coupler system

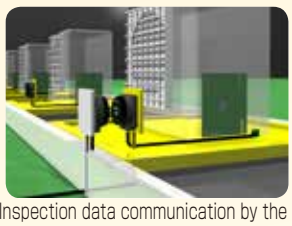
Wireless power supply+Input / Transmission Output switch signal or Data Communication

Supplies power up to 24V/2A to an apparatus wirelessly to operate a large number of sensors and drive apparatus.
Transmit drive electricity to electromagnetic valve or Power Moller. And controls signal and interactive type can receive various detective signals. Having the transmission of the signal of the fieldbus which is most suitable for serial communication such as the RS232C and manage large number of control equipment.

～ Application ～

Identifying and verifying workpiece on a turntable
Using Solenoid valve for clam work

Leak test for the bottle
Inspect it by high-speed communication (CC-LINK)



Inspection data communication by the RS232C

■ Input/Output Switch signal transmission　Sending the power supply by wireless at the same time while transmitting I/O of input, the output.

Power : 24V DC/300mA
Switch signal transmission
Input 4 + Output 4 signals.

Power: 24VDC/ 2A
Switch signal transmission
Input 8 + Output 8 signals.

Power: 24VDC/ 2A
Switch signal transmission
Input 64 + Output 32 signals.
can be controlled from
CC-Link, DeviceNet, EtherNet/IP

■ Data Signal transmission　Data Signal transmission + Power supply at the same time.

Power : 24V DC/1A
Data Signal transmission
RS-232C (Serial)

RS-232C
Serial communication

Voltage: 24VDC/ 2A
Data Signal transmission
CC-Link,DeviceNet,PROFI-BUS

DeviceNet CC-Link PROFIBUS

Voltage: 24VDC/ 2A
24V DC/1A
Data Signal transmission
IO-Link

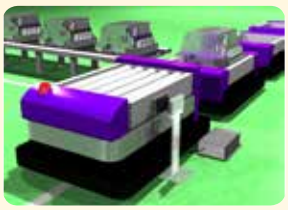
IO-Link

Remote Power supply system

Wireless Power supply, Wireless Charging

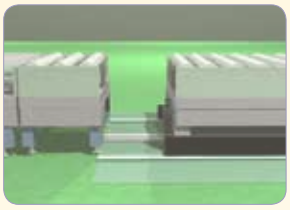
Type specialized in electricity transmission, and use for a robot and AGV and battery charging as the drive power supply of power Moller and the motor.
Various products including the lead battery type as well as a lithium charge type battery are available.

～ Application ～



Battery charge of AGV

Battery charge of humanoid robot



Feeding power Moller

■ Wireless Power Supply　Supplies a power supply for various load (motors)

Power supply only
24V DC / 1A(24W)

Power supply only
12V DC/2.5A (30W)
24V DC/2A (48W)

Power supply only
24V DC/5A (120W)

This products must be used under 100VAC. Please check that the voltage matches the usage environment before use.

■ Wireless Charging　Charges for the lead batteries.

Lead battery
Lithium ion battery
15V DC/34A
30V DC/20A
60V DC/10A
(600W)

Lead battery only
30V DC/7A (210W)

Lead battery only
120W Type
14.8V DC /2A
29.0V DC/4.3A

Lead battery only
30W Type
14.4V DC/2A

Wireless Power Supply by
B & PLUS K.K.

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

* 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.