



## RFID System Z series

Z1 Data carrier  
Z3 Read/Write head  
Z4 Processor

Mitsubishi Electric Partner Products



**Direct mounting! Simple! Low cost!**

**MELSEC Q**

**CC-Link**

Directly connect with MELSEC-Q or CC-Link !



**B&PLUS**

RFID system

**Z series**

Comply with  
ISO 15693 standard



# Reduce the initial installation cost by direct mounting

Labor saving, Space saving, Cost saving by direct mounting on MELSEC-Q PLC



## Direct mounting on MELSEC-Q base unit

Processor Z4-Q001 is a RFID interface unit approved by MELSEC-Q bus system.

## Save space by 2 ch.

Up to two Read/Write head is connectable and it can communicate with the Data carrier with different instructions for each Read / write head .

## D-2N series\* Corresponds to ID dedicated instruction

It can be processing by the shorter program than the FROM / TO instructions If replaced from D-2N series, existing program can be diverted unchanged.

\*D-2N is a Mitsubishi electric RFID system

## Electrical design merit

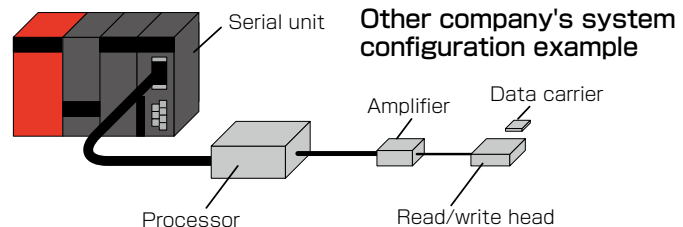
### Simple equipment configuration

- Labor saving
- Cost saving
- Space saving



Construction of RFID system requires to prepare each of following Data carrier, Read/Write head, Amplifier and Processor, and also needs the serial unit to connect RFID system and PLC. In addition to the purchase cost of these, labor and space for installation become customer burden at the time of introduction.

Z4-Q is MELSEC-Q bus direct mounting! Ease the burden and cut back the introduction cost.



### CC-Link connection type is available

To the system, which shares other series existing facilities such as a MELSEC-AnS, CC-Link connection Processor is available.

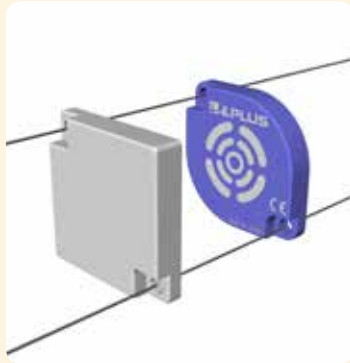


\*1 It corresponds to MELSEC-Q unit ID dedicated instruction

\*2 Corresponding to the processing instruction for the ID interface unit AJ65BT-D35ID2.

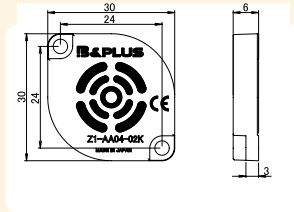
# Mechanical design merit

## No additional work for replacing from D-2N03P is required.



Same mounting hole size with D-2N

Z1-AA04 and D-2N03P\*3 are same dimensions, so no additional work for replacement is required.



Data carrier lineups.

Ceramic Data carrier

Good chemical resistance

Flexible Data carrier

Bendable and flexible

\*3 D-2N03PS and D-2N03PM are Data carrier for RFID system manufactured by Mitsubishi electric company

## Easy confirmation of Read/Write head setting



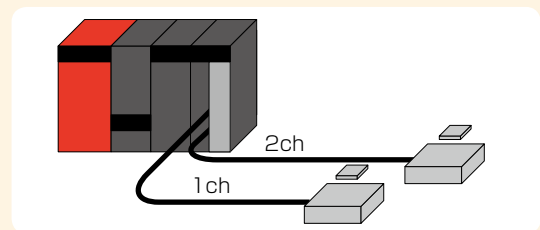
Large indicator

Easy visual confirmation with large LED on top side.

Indication line

The line on the housing helps to confirm a center of communication surface and makes it easy to confirming the setting position

## Space & cost saving with 2 in 1 Processor



Reduce in board space by connecting two Read/Write heads.

## Table of replacements list

Corresponding part name of each devices to be replaced to B&Plus Z series from the Mitsubishi RFID system D-2N series is as follows.

Item	D-2N series Part name	Z series Part name	Remarks and differences
Processor MELSEC-Q direct mounting	QD35ID1 QD35ID2	Z4-Q001 Z4-Q002*4	Read/Write head connection : connector → Terminal block
Processor CC-Link connection	AJ65BT-D35ID2	Z4-C001 Z4-C002*5	① External dimensions, incompatible on installation
Data carrier	D-2N03PS(Mounted in non metal) D-2N03PM(Mounted in metal)	Z1-AA04-02K	① Communication distance ( ) is mounted in metal : 40 (15)mm → 30 (22)mm ② Writing cycle : 300,000times → Unlimited ③ Memory size : 320byte → 2Kbyte
Read/Write head	D-2N422RWS(-C2) D-2N422RW(-C2)	Z3-A010-CN	① External dimensions, incompatible on installation ② Optional Read/Write head cable
Cable for Read/Write head	D-NS422CAB_ ( Extension )	Z7-A001-PU_ (For Z4-Q00_)  Z7-A003-PU_ (For Z4-C00_)	① Maximum cable length : 100m → 25m ② Angle type connector on the Read/Write head side is available

\*4 ID dedicated instruction specification

\*5 Communication compatibility

# Z series product index

## Processor



Type code	Standard Specification	<b>Z4-Q001</b>	<b>Z4-C001</b>
	Mitsubishi Electric ID system compatible specification	<b>Z4-Q002</b> (ID dedicated instruction specification) <sup>*1</sup>	<b>Z4-C002</b> (AJ65BT-D35ID2 Communication compatible) <sup>*2</sup>
Interface		MELSEC-Q BUS direct mounting	CC-Link connection
Supply voltage		24V DC ± 10% / 0.75A	24V DC ± 10% / 0.8A
PLC power supply		5V DC / 0.5A	
Number of occupied I/O		32 signals	16 signals
Number of connected Read/Write head		Connectable up to 2 units	Connectable up to 2 units
How to connect Read/Write head		terminal block connection	Connector connection

## Read/Write head



Type code	<b>Z3-A010-CN</b>
Size	W80xH80xD30mm
Case material	PBT
Connection	Cable for 8-pin connector

## Data carrier

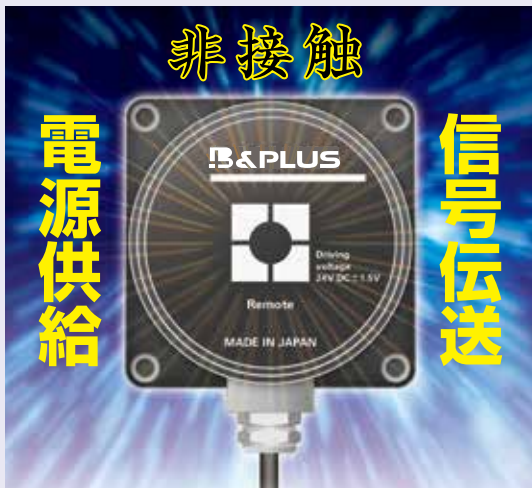


Type code	<b>Z1-AA04-02K</b>	<b>Z1-EC02-128</b>	<b>Z1-FA01-128</b>
Size	30X30X6mm	Ø26X3mm	Ø16X0.8mm
Features	D-2N Compatible on installation	Ceramic Data carrier	Flexible Data carrier
Capacity	2K byte	112 byte	112 byte

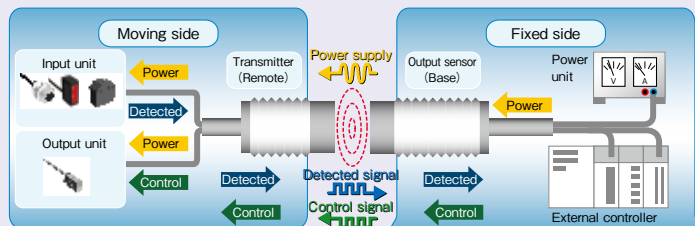
\*1 It corresponds to MELSEC-Q unit ID dedicated instruction

\*2 Corresponding to the processing instruction for the ID interface unit AJ65BT-D35ID2.  
AJ65BT-D35ID2 is a Processor for CC-Link manufactured by Mitsubishi Electric Corporation.

## Introduction of Remote sensor system



B&PLUS Remote system is an original connection system which supplies power and transmits signals by air gap at a time.



It can supply the power for 1 sensor and up to 24 VDC/2 Amp. as maximum. Signal transmission from 1 signal to 64 signals are available.

Other signal transmission types, Thermocoupler, Load-cell, RS-232C and CC-Link are available.

Remote system realizes the automation and efficiency to the moving parts, like index-table or Pallet which connect by the slip-ring or connector for signal and power transmission.

<http://www.b-plus-kk.jp/remote>

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\*Specification is subject to change without notice.

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