

### **RFID System for Factory automation**



## Z series

- **Z1** Data carrier
- **Z3** Read/Write head
- **Z4 Processor**

Mitsubishi Electric Partner Products



**Specification for 2 Channels** 

# Direct mounting! Simple! Low cost!



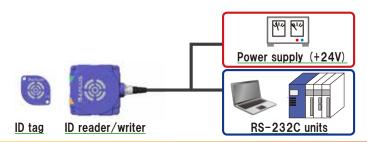
## ID reader/writer with a built-in controller

- -Highly versatile RS232C (serial) input/output!
- -Controller built into the antenna!
- Windows compatible read/write software included!



### contributes to cost reduction!

No ID controller required, helping to reduce installation costs! The signal is RS-232C output so it can be used with a variety of devices.









### Because it is direct connection it can reduce a burden at the time of the induction process.

## Electrical Design Benefits

Simple configuration

-Labor saving -Cost saving -Spece saving

To construct the ID system, ID tag, ID antenna, an antenna amplifier, each apparatus and ID system of the ID controller and also the sequencer that can connect o serial unit is necessary.

In addition to the purchase cost of these, labor and space for installation become customer burden at the time of introduc-

In Z4-Q, Q bus direct connection, Z4-IQR001 is directly connected to iQ-R bus! Ease the burden and cut back the introduction cost.

Additional merit = -

The IQR is equipped with test functions that are useful during installation, maintenance, and troubleshooting of equipment.

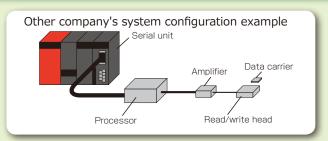
#### CC-LINK connection type is available

CC-Link connection ID controller supports other MELSEC series and PLC.

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

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

Direct mounting! **MELSEC-Q** MELSEC iO-R Processor Z4-Q001 Z4-Q0022 (ID dedicated instruction specification)\*1 Z4-IOR001 ID コントローラ ID tag MELSEG Q Z1-AA04-02K iQ-R MELSEC Recognized Read/Write head Z3-A010-CN





MELSOFT GX Works 3 supports from programming to operation!





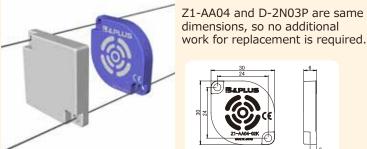
GX-Works3

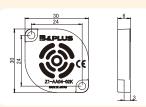
The MELSEC iQ - R direct connection ID controller Z4 -IQR001 is compatible with GX Works 3, which is software manufactured by Mitsubishi Electric Corporation. It is possible to design and also programming from GX Works. It is very easy to introduce ID system.

### Mechanical design merit

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

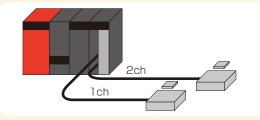
#### Same mounting hole size with D-2N Z1-AA04 and D-2N03P are same dimensions, so no additional



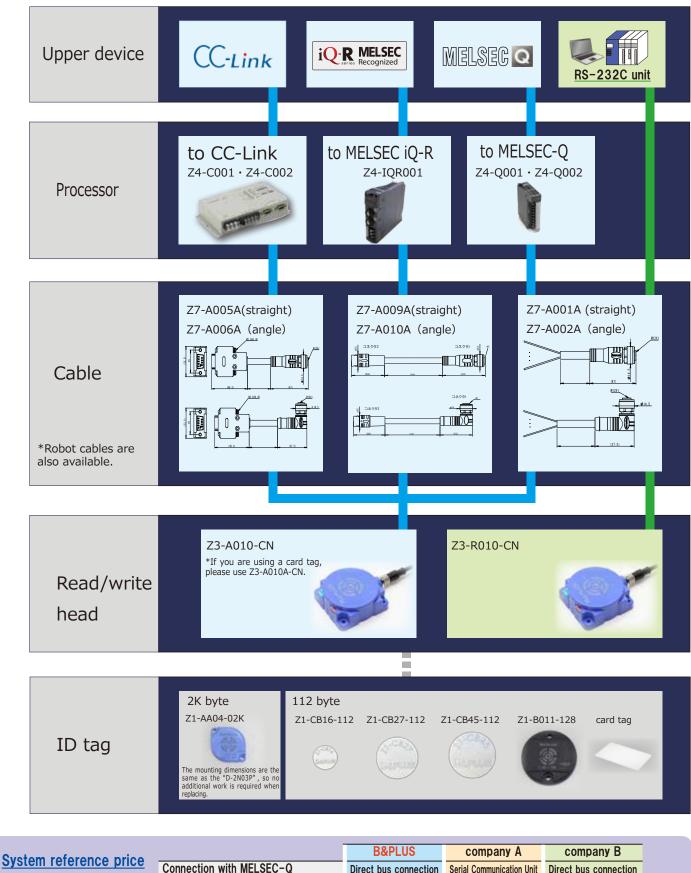


Reduce in board space by connecting two read/write head

#### Space saving & cost saving with 2in1 Processor



## **(system configuration)**



MELSEC-Q Series **RFID System Equipment** Configuration

	B&PLUS	company A	company B	
Connection with MELSEC-Q	Direct bus connection	Serial Communication Unit	Direct bus connection	
ID tag (2K)	1,900	3,800	3,800	
Read/write head	36,000	14,200	14,200	
Amplifier	_	33,000	33,000	
Read/write head cable (2m)	6,500	_	_	
Processor (2 ch)	98,000	210,000	210,000	
MELSEC-Q serial communication unit	_	90,000	_	
Total amount	142,400	351,000	261,000	
Reference standard price (as of the end of June 2020) Unit (yen)				

#### Z series product index Processor

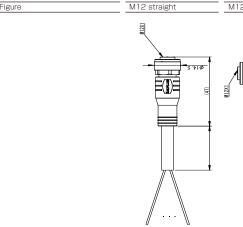


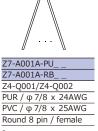




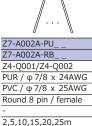
Type code	Standard type	Z4-Q001	Z4-C001	Z4-IQR001
	Mitsubishi ID system compatible	Z4-Q002(Correspond to ID special instruction ) $^{*4}$	Z4-C002 (AJ65BT-D35ID 2 way communication exchange) *5	
Interface		MELSEC-Q BUS direct mounting	CC-LINK connection	MELSEC- R BUS direct mounting
Supply voltage	е	24V DC ± 10% / 0.75A	24V DC ± 10% / 0.8A	24V DC ± 10% / 0.3A
PLC power su	pply	5V DC / 0.5A		5V DC / 0.5A
Number of oc	cupied I/O	32 signals	16 signals	32 signals
Number of connected Read/		Connectable up to 2 Read/Write	Connectable up to 2 Read/	Connectable up to 2 Read/Write
Write head		heads	Write heads	heads
How to connect R/W head		terminal block connection	Connector connection terminal block connection	

#### (Antenna cable (between Read/Write head and Processor)

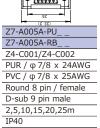




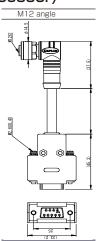




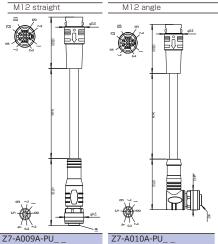
IP67 (Antenna side)



0 (O)



Z7-A006A-PU Z7-A006A-RB Z4-C001/Z4-C002 PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG Round 8 pin / female D-sub 9 pin male 2,5,10,15,20,25m IP40



	27 710107110
	Z7-A010A-RB
	Z4-IQR001
	PUR / φ 7/8 x 24AWG
	PVC / φ 7/8 x 25AWG
	Round 8 pin / female
	Round 10 pin / male
	2,5,10,15,20,25m
	IP67 (the antenna side)
_	

#### Read/Write head

Regular cable

Regular cable

Robot cable

Processor side

cable for industrial robot

Read/Write head side

Type code

Connector

Cable length

Protection class

Cable

Applicable Processor



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

Z7-A009A-RB

PUR / φ 7/8 x 24AWG

PVC / φ 7/8 x 25AWG

Round 8 pin / female

Round 10 pin / male

IP67 (the antenna side)

2,5,10,15,20,25m

Z4-IQR001

#### **IDtag**

Type code	Z1-AA04-02K	Z1-B011-128	Z1-CB16-112	Z1-CB27-112	Z1-CB45-112
Feature	D-2N Compatible install	Long distance D tag	Thin Tag	Thin Tag	Thin Tag
		75 A PM A MG 71 - 30 11 4 120 1405 AP	Table 18	D.C. 82	DEPLIS
Size	30 × 30 × 6mm	Φ 50 × 8.3mm	Φ 16 × 0.76mm	Φ 27 × 0.76mm	Φ 45 × 0.76mm
Available memory capability	2k byte(FRAM)	112byte (EEPROM)			

Wireless Power Supply by

### B&PLUS K.K.

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

<sup>\*4</sup> It corresponds to MELSEC-Q unit ID dedicated instruction
\*5 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.

<sup>\*</sup> Contents is subject to change without notice.