

Z series

Z1 Data carrier
Z3 Read/Write head
Z4 Processor

**Mitsubishi Electric
Partner Products**



Specification for 2 Channels



Direct mounting ! Simple! Low cost!

MELSEC Q

CC-Link

iQ-R MELSEC
series Recognized

Can be directly connected to MELSEC-Q or MELSEC iQ-R or CC-Link!!



Comply with ISO 15693 standard



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

MELSEC-Q
MELSEC iQ-R

Labor saving, space saving and cost saving by direct mounting on sequencer.



◎ Q (iQ-R) mounting base unit

I D controller : Z4-Q001 is MELSEC-Q series
I D controller : Z4-IQR001 is for MELSEC iQ-R series.
Mitsubishi Electric Partner Products.

◎ Save space by 2 ch.

Possible to connect two ID antennas, and by the different order, each antenna with the ID tag can communicate.

◎ Z4-Q002 is * ◎ D-2N series

*Corresponds to ID dedicated instruction

It can be processing by the shorter program than the FROM / TO instructions Substitution from the D-2N series can just use a program.

D-2N is a Mitsubishi electric RFID system

◎ State representation in LED

It can confirm the communication situation, connection situation and the error with LED.

Electrical design merit

Simple equipment 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 introduction.

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.

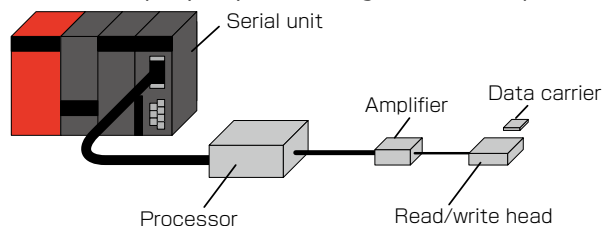
CC-LINK connection type is available

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

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

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

Other company's system configuration example



MELSOFT GX Works 3 supports from programming to operation!

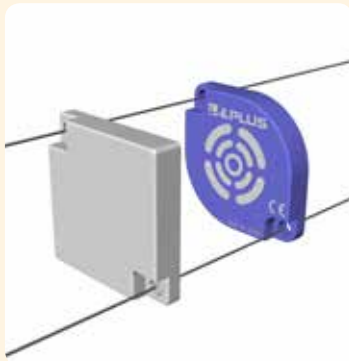


**GX-Works3
OK!!**

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.

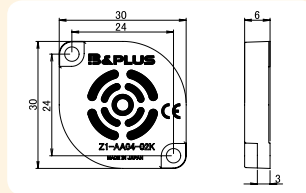
Mechanical design merit

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



Same mounting hole size with D-2N Other data carrier

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



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

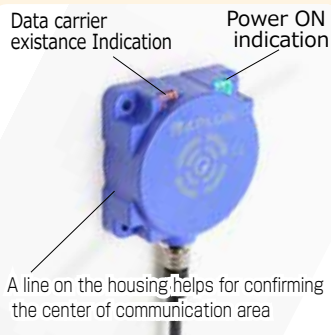
Ceramic ID tag

Long distance D tag

Flexible ID tag

Many line ups such as ceramic tag with good chemical resistance. Flexible tag that can be folded. Long distance tag with long measuring distance.

Easy confirmation of Read/Write head setting



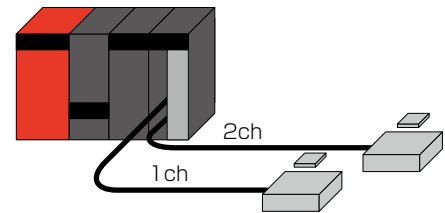
Large indicator on top side

Easy visual confirmation with large LED on top side

Indication line on the side of housing

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

Space saving & cost saving with 2in1 Processor

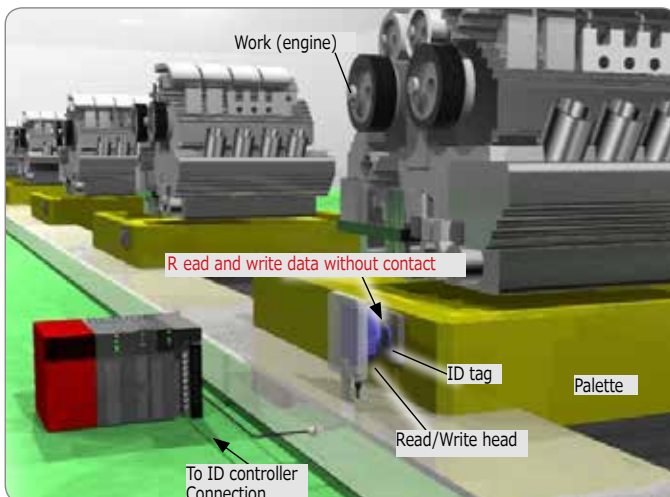


Reduce in board space by connecting two read/write head

■ Application

Adoption example in pallet identification of assembly conveyance line

Adoption example at the food production line



Benefits of introducing ID tag

◆ Verification

Read the information written in the ID tag and check the traceability data.

◆ Reduction of the careless mistake

Data verification is reliable and quality has improved.

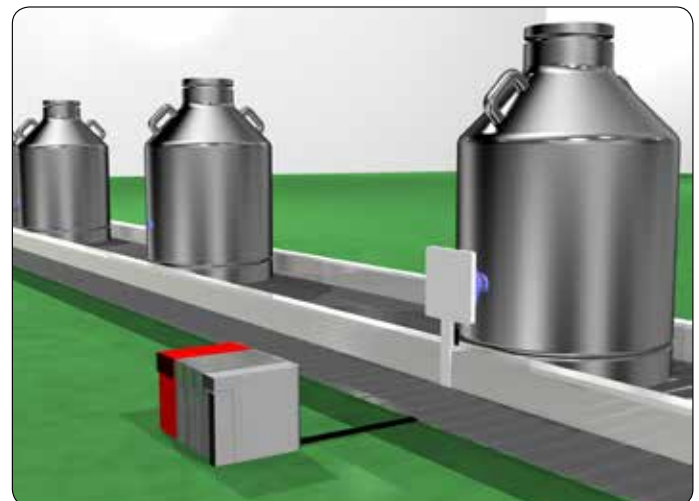
◆ Waterproof / dust proof

Due to its high waterproof / dustproof structure, it can be used in places where water is applied or where there is dust.

◆ Unified management of systems

Unified management of data can be done at the upper level of the sequencer.

Point For the quality improvement, the management of inspection data is important. In the process of data verification, it leads to efficient production of higher quality products.



Benefits of introducing ID tag

◆ Management of the freshness

Certain processing is possible to read information and to write it in an ID tag.

◆ Working hour

Since it is electromagnetic induction type, ID tag can be read and written without concern for external light!

◆ Easy to manage the individual

Unlike the two-dimensional bar-code, since it is readable and writable, it can correspond to sudden changes immediately.

Point By making freshness management quick and accurate, it is possible to produce foods that lead to safety and secure.

Z series product index

Processor



Type code	Standard Specification Mitsubishi Electric ID system compatible specification	Z4-Q001	Z4-C001	Z4-IQR001
		Z4-Q002(Correspond to ID special instruction)*4	Z4-C002 (AJ65BT-D35ID 2 way com- munication exchange)*5	
Interface		MELSEC-Q BUS direct mounting	CC-LINK connection	MELSEC- R BUS direct mounting
Supply voltage		24V DC ± 10% / 0.75A	24V DC ± 10% / 0.8A	24V DC ± 10% / 0.3A
PLC power supply		5V DC / 0.5A		5V DC / 0.5A
Number of occupied I/O		32 signals	16 signals	32 signals
Number of connected Read/Write head		Connectable up to 2 Read/Write heads	Connectable up to 2 Read/Write heads	Connectable up to 2 Read/Write heads
How to connect Read/Write head		terminal block connection	Connector connection	terminal block connection

*4 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.

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

Figure	M12 straight	M12 angle	M12 straight	M12 angle	M12 straight	M12 angle	
Type code	Regular cable cable for industrial robot	Z7-A001A-PU _ Z7-A001A-RB _	Z7-A002A-PU _ Z7-A002A-RB _	Z7-A005A-PU _ Z7-A005A-RB _	Z7-A006A-PU _ Z7-A006A-RB _	Z7-A009A-PU _ Z7-A009A-RB _	Z7-A010A-PU _ Z7-A010A-RB _
Applicable Processor		Z4-Q001/Z4-Q002	Z4-Q001/Z4-Q002	Z4-C001/Z4-C002	Z4-C001/Z4-C002	Z4-IQR001	Z4-IQR001
Cable	Regular cable cable for industrial robot	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG	PUR / φ 7/8 x 24AWG PVC / φ 7/8 x 25AWG
Connector	Read/Write head side Processor side	Round 8 pin / female -	Round 8 pin / female -	Round 8 pin / female D-sub 9 pin male	Round 8 pin / female D-sub 9 pin male	Round 8 pin / female Round 10 pin / male	Round 8 pin / female Round 10 pin / male
Cable length		2,5,10,15,20,25m	2,5,10,15,20,25m	2,5,10,15,20,25m	2,5,10,15,20,25m	2,5,10,15,20,25m	2,5,10,15,20,25m
Protection class		IP67 (Antenna side)	IP67 (Antenna side)	IP40	IP40	IP67 (the antenna side)	IP67 (the antenna side)

Read/Write head



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

ID tag



Type code	Z1-AA04-02K	Z1-FA01-128	Z1-FB01-128	Z1-EC02-128	Z1-B011-128
Size	30X30X6mm	Ø16X0.8mm	Ø28X0.8mm	Ø26X3.4mm	Ø50X8.3mm
Features	D-2N Compatible on installation	Flexible ID tag	Flexible ID tag	Ceramic ID tag	Long distance D tag
Capacity	2K byte	112 byte	112 byte	112 byte	112 byte

Wireless Power Supply by
B & PLUS K.K.

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

* Contents is subject to change without notice.