

High-Speed Counter Modules

DC input,
transistor (sink) output

RD62P2
2-channel

DC input,
transistor (source) output

RD62P2E
2-channel

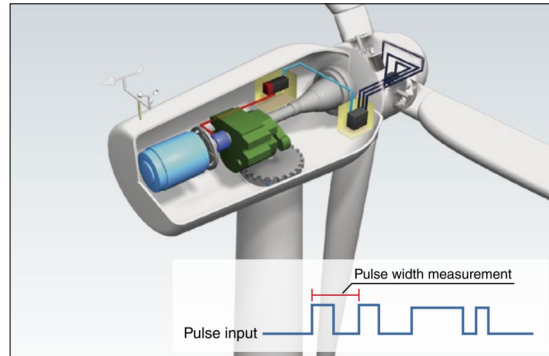
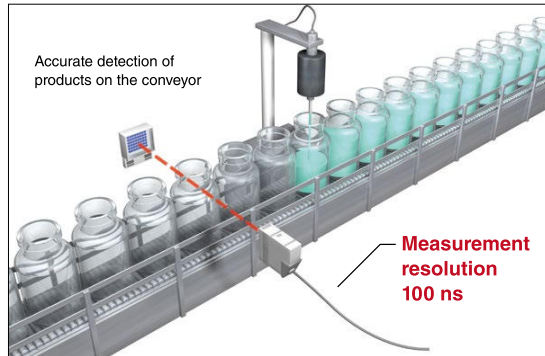
Differential input,
transistor (sink) output

RD62D2
2-channel

The MELSEC iQ-R Series counter modules are capable of 200k pulse/s for the DC input type, and 8M pulse/s for differential input. When used with a high-accuracy incremental encoder, positional tracking can also be realized. It also features a PWM output, which is ideal for applications requiring a measurement of pulse cycles.

Pulse measurement

The pulse measurement feature enables measuring of the pulse cycle, which is ideal for various applications such as in the food and beverage industry where proximity sensors are used to control flask position on the conveyor, or the renewable energy industry where the wind vane angle is controlled on a wind turbine.



High-speed PWM output

The PWM output frequency can support up to 200 kHz with a minimum 100 ns pulse width (proportion to 'on' time) during the required duty cycle. The set values can be changed during operation without having to stop the system, such as in industrial-scale fan control.

High-speed counter module specifications

Item	RD62P2	RD62P2E	RD62D2
Number of channels (ch)	2	2	2
Count input signal			
1-phase input (1 multiple/2 multiples)	●	●	●
2-phase input (1 multiple/2 multiples/4 multiples)	●	●	●
CW/CCW input	●	●	●
Signal level (oA, oB)	2...5 mA at 5/12/24 V DC	2...5 mA at 5/12/24 V DC	EIA Standard RS-422-A Differential line driver level
Counter			
Counting speed (pulse/s)	10k...200k	10k...200k	10k...8M
Counting range (32-bit signed binary)	-2147483648...2147483647	-2147483648...2147483647	-2147483648...2147483647
External input			
Preset, function start	7...10 mA at 5/12/24 V DC	7...10 mA at 5/12/24 V DC	7...10 mA at 5/12/24 V DC
Digital filter (ms)	0, 0.1, 1, 10	0, 0.1, 1, 10	0, 0.1, 1, 10
Pulse measurement			
Resolution*1 (ns)	100	100	100
Number of points per channel	1	1	1
External output			
Coincidence output (2 points/channel)	Transistor (sink type) output, 12/24 V DC, 0.5 A/point	Transistor (source type) output, 12/24 V DC, 0.1 A/point	Transistor (sink type) output, 12/24 V DC, 0.5 A/point
PWM output			
Output frequency range (kHz)	0...200	0...200	0...200
Duty ratio	Multiples of 0.1 μs	Multiples of 0.1 μs	Multiples of 0.1 μs
Number of output points per channel	2	2	2
Setting change during operation	●	●	●
External interface*2			
40-pin connector	●	●	●

*1. Pulse measurement can be performed in the range of 2000 to 2147483647 (0.2 ms to approx. 214 s).

*2. For more information about external interface (for applicable options, please refer to the relevant product manual), refer to the option lists on page 115.