ORDERING INFORMATION Model : RPPD

PLEASE FILL IN THIS SECTION	FACTORY USE ONLY	
Model	Job No.	Approved by (Sales office)
Company	Ser No. –	Issued by (Sales office)
Name	Sales	
P/O No.		

Specify the items you want to change. Default setting will be used if not otherwise specified.
DEFAULT shows values in case of nothing specified.

■ SETTINGS FOR PULSE INPUT (Choose any one of A, B, C, D, and the H, and mark inside the ❑. Remember to select the same code for input 1 and 2.)

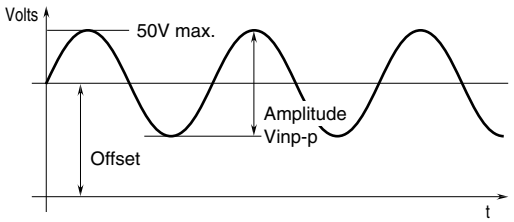
INPUT 1

❑ **A**: Dry Contact (Pulse ON/OFF for discrete or open collector)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Input	❑ Dry contact ❑ Semiconductor contact	Semiconductor contact	Chattering protection filter (With 1) is automatically provided for Dry Contact
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms) *1 2, for noise (0.1 ms)*1
Detecting level 1 – 8 V*2	V*3	2 V	Adjusted to 2 V if not otherwise specified.
Hysteresis 0 – 5 V	V*3	0.5 V	Adjusted to 0.5 V if not otherwise specified.

❑ **B**: Voltage pulse (The voltage pulse which is not available on C and D)

ITEM	DATA	DEFAULT VALUE	CONTENTS	
Input waveform	❑ Square wave ❑ Sine wave	Square wave	Other ( )	
Input coupling	❑ DC ❑ AC	DC	Specify AC coupling for pulses with large offset which does not match the threshold requirement.	
Input amplitude	Vp-p	Used to identify the type of wave	Amplitude is 0.5 – 50 Vp-p	These specifications are necessary for accurate description of the pulse.
Input offset	V		Offset: ≤50 V	
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1	
Detecting level 0 – 15 V	V*3	mid-range amplitude	Adjusted to the mid-range amplitude if not otherwise specified.	
Hysteresis 0 – 5 V	V*3	0.5 V or 1/3 amplitude	Adjusted to 0.5 V if not otherwise specified.	



❑ **C**: 5 V voltage pulse (Signal amplitude is approx. 5 V and offset is Vp-p / 2)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **D**: 12 V, 24 V voltage pulse (Signal amplitude is 10-24 V and offset is Vp-p / 2)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **H**: 2- wire current pulse (current pulse with 2-wire sensor)

ITEM	DATA	DEFAULT VALUE	CONTENTS
ON current (H) 0–25 mA	mA	14.5 mA	Detects as "High" at ≥ 14.5mA (default if not otherwise specified); Receiving resistor 100Ω
OFF current (L) 0–25 mA	mA	9.5 mA	Detects as "Low" at ≤ 9.5mA (default if not otherwise specified); Receiving resistor 100Ω
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **J**: RS-422 line driver pulse (differential voltage pulse of RS-422 line driver). Input parameter is determinated by line receiver IC.

*1. Time constant shown in parentheses. Refer to'INPUT FILTER.

*2. Available range depends on the excitation supply specifications.

*3. Specify the value so that the relation between detecting level: V_{TH} and hysteressis V_{HY} is expressed as: $V_{TH} - \frac{V_{HY}}{2} \geq 0$

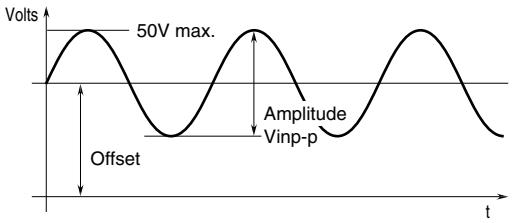
INPUT 2

❑ **A**: Dry contact (ON/ OFF pulse for discrete or open collector)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Input	❑ Dry contact, ❑ Semiconductor contact,	Semiconductor contact,	Chattering protection filter (With 1) is automatically provided for Dry Contact
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1. For chattering (10 ms)*1 2. For noise (0.1 ms)*1

❑ **B**: Voltage pulse (The voltage pulse which is not available on C and D)

ITEM	DATA	DEFAULT VALUE	CONTENTS	
Input waveform	❑ Square wave ❑ Sine wave	Square wave	Other ( )	
Input coupling	❑ DC ❑ AC	DC	Specify AC coupling for pulses with large offset which does not match the threshold requirement.	
Input amplitude	Vp-p	Used to identify the type of wave	Amplitude is 0.5 – 50 Vp-p	These specifications are necessary for accurate description of the pulse.
Input offset	V		Offset: ≤50 V	
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1	



❑ **C**: 5 V voltage pulse (Signal amplitude is approx. 5 V and offset is Vp-p / 2)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **D**: 12 V, 24 V voltage pulse (Signal amplitude is 10-24 V and offset is Vp-p / 2)

ITEM	DATA	DEFAULT VALUE	CONTENTS
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **H**: 2- wire current pulse (current pulse with 2-wire sensor)

ITEM	DATA	DEFAULT VALUE	CONTENTS
ON current (H) 0–25 mA	mA	14.5 mA	Detects as "High" at ≥ 14.5mA (default if not otherwise specified); Receiving resistor 100Ω
OFF current (L) 0–25 mA	mA	9.5 mA	Detects as "Low" at ≤ 9.5mA (default if not otherwise specified); Receiving resistor 100Ω
Filter	❑ With 1 ❑ With 2 ❑ None	No filter	1, for chattering (10 ms)*1 2, for noise (0.1 ms)*1

❑ **J**: RS-422 line driver pulse (differential voltage pulse of RS-422 line driver). Input parameter is determinated by line receiver IC.

*1, Time constant shown in parentheses. Refer to'INPUT FILTER.'

■ SETTINGS FOR PULSE OUTPUT (Specify one-shot output only)

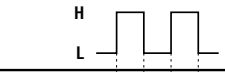
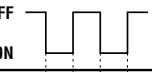
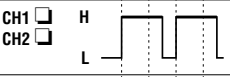
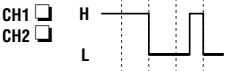
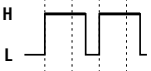
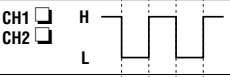
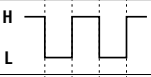
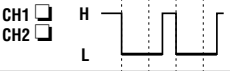
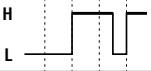
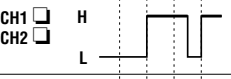
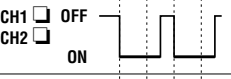
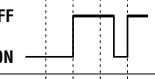
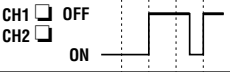
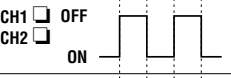
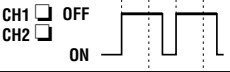
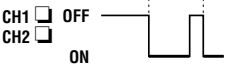
OUTPUT 1

ITEM	DATA	DEFAULT VALUE	CONTENTS
Output pulse width	❑ One shot period ms	50 ms	Available selecting range (0.030 – 300 ms)

OUTPUT 2

ITEM	DATA	DEFAULT VALUE	CONTENTS
Output pulse width	❑ One shot period ms	50 ms	Available selecting range (0.030 – 300 ms)

■ Select pulse input and output logic relation from the table below and specify in the ❑ the channels one by one.

OUTPUT WAVEFORM		INPUT WAVEFORM	VOLTAGE PULSE or 2-WIRE CURRENT PULSE RS-422 LINE DRIVER PULSE	DRY CONTACT
VOLTAGE PULSE or RS-422 LINE DRIVER PULSE	Non Reversed	No pulse width conversion		
		One-shot, detecting input pulse rise		
		One-shot, detecting input pulse drop		
	Reversed	No pulse width conversion		
		One-shot, detecting input pulse rise		
		One-shot, detecting input pulse drop		
OPEN COLLECTOR or POWER PHOTO MOSFET RELAY	Non Reversed	No pulse width conversion		
		One-shot, detecting input pulse rise		
		One-shot, detecting input pulse drop		
	Reversed	No pulse width conversion		
		One-shot, detecting input pulse rise		
		One-shot, detecting input pulse drop		

The pulse width in one-shot means the bold lined section of a pulse waveform.
***Pulse rise for RS-422 line driver pulse can not be detected.**

■ INPUT FILTER

Two types of input filters are available (chattering protection: 10ms, noise protection: 0.1ms). Both can pass low frequency band. The tables below show examples of the maximum frequency which can pass through the filter when the sensitivity level is set to 2V. The frequency may change according to the sensitivity level. If you use a frequency higher than shown below, choose “None” for filter. Otherwise, input signal itself may be rejected.

•Noise Filter Type 1 (chattering protection)

DC Coupling		AC Coupling	
V p-p (V)	MAX. FREQ. (Hz)	V p-p (V)	MAX. FREQ. (Hz)
5	69	5	22
12	35	12	65
24	89	24	112

•Noise Filter Type 2 (noise protection)

DC Coupling		AC Coupling	
V p-p (V)	MAX. FREQ. (Hz)	V p-p (V)	MAX. FREQ. (Hz)
5	1220	5	256
12	329	12	664
24	851	24	1090