

This compact plug-in converter (pulse isolator) receives a pulse train signal extracted from the sensor or control equipment, adds waveform shaping, insulation, and level conversion, and then outputs two pulse string signals. And also provides isolation between the signal input, output, and power supply.

## Features

- ★ Built in excitation 12Vdc  $\pm 5\%$  25mA (Sensor power supply)
- ★ Dielectric strength of 2000Vac between input, output and power supply
- ★ Isolated two signal outputs are available
- ★ Both AC and DC power supply are available
- ★ CE approved, RoHS compliant
- ★ Output modes can be selected with the DIP switch

## Ordering code

WSP- **FZP** - [ ] [ ] [ ] - [ ] [ ]

Code	Input
14	Voltage pulse Compatible with proximity switch and light switch [1]: 5 to 30V, [0]: -30 to 1.5V Input impedance: 20k $\Omega$ or more
	ON-OFF pulse Compatible with non-voltage contact and open collector 11V at OFF, 2mA at ON
99 *1	Contact us for other than the above

Code	Test Report
X	None
T	With Test report

Code	Power Supply
A	100 to 240Vac $\pm 10\%$ 50/60Hz
D	24Vdc $\pm 10\%$
8	100 to 120Vdc $\pm 10\%$

Code	Output 2	Rated value
C	Open collector	30Vdc, 30mA or less, ON-voltage 0.4V or less
K	12V voltage pulse output	[1]: 12V, [2]: 0.4V or less Internal resistance 620 $\Omega$
J	5V voltage pulse output	[1]: 5V, [2]: 0.4V or less Internal resistance 330 $\Omega$

\* 1...DIP switch must be kept at factory settings when code 99. Also, can't provide code 99 with CE marking.

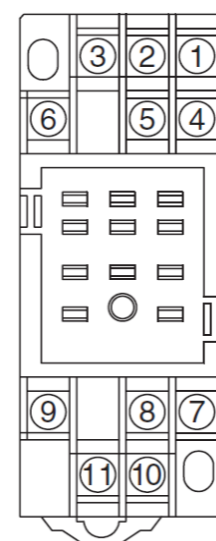
Code	Output 1	Rated value
E	One-shot non contact output (Max. 5Hz) For driving AC/DC electromagnetic counter ON-time 100ms	ON-voltage : 2V (max.) ON-current : 500mA or less Operating circuit voltage : 200Vdc, 130Vac or less
C	Open collector output DIP switch selection between normal and one-shot outputs One-shot On-time 100ms (Max. 5Hz)	30Vdc, 30mA or less ON-voltage : 0.4V or less
J	5V voltage pulse output DIP switch selection between normal and one-shot outputs One-shot On-time 100ms (Max. 5Hz)	[1]: 5V, [0]: 0.4V or less Internal resistance : 620 $\Omega$
K	12V voltage pulse output DIP switch selection between normal and one-shot outputs One-shot On-time 100ms (Max. 5Hz)	[1]: 12V, [0]: 0.4V or less Internal resistance : 620 $\Omega$
N	Photo MOS relay Both AC and DC available Maximum output frequency 0.5Hz FS (Only for AC power supply)	Recommended circuit to be used : 100Vac, 2000Vdc 400Vac at peak, load current 0.5A or less Leakage current : 10 $\mu$ A at open
G	One-shot non-voltage contact output ON-time 100ms Maximum output frequency 5Hz FS (Only for AC power supply)	Rated control capacity : 24Vdc, 0.2A (max.) 100mVdc, 100 $\mu$ A (min.) 250Vac, 0.2A Contact life : 20 million times mechanically and a hundred thousand times electrically
S	Contact us for other than the above	

## Specifications

Input / output frequency	DC to 100kHz (any frequency)
Input waveform	Square or sine (Duty ratio 25 to 75%)
Built in excitation (Sensor power supply)	12Vdc $\pm 5\%$ 25mA
Output waveform	For output code : 'E', 'G' One-shot output with ON-time of 100ms (Max. 5Hz) For output code : 'C', 'J', 'K', 'N' Square wave synchronized with input frequency or One-shot output with ON-time of 100ms (Max. 5Hz) (output signal becomes unstable for 1 pulse when
Operating temperature	-5 to +55 $^{\circ}$ C
Operating relative humidity	90% or less (non-condensing)
Isolation	Between input, output, and power supply
Insulation resistance	100M $\Omega$ or more with a 500Vdc megger Between input, output, and power supply terminal
Dielectric strength	2000Vac for 1 minute
Power consumption	Approx. 4.0VA (AC), Approx. 60mA (24Vdc)
Dimensions	84(H) X 23(W) X 106.5(D)mm
Weight	Approx. 130g
Structure	Plug-in
Connection	M3 SEMS screw part of the base socket

Material of terminal screw	Chromated iron
Case color and material	Ivory, heat-resistant ABS resin(94V-0)
Mounting	DIN rail or wall surface

## Terminal connections



No.	Signal	Description
1	INPUT(+)	Input
2	No.2 OUTPUT(+)	No.2 Output
3	INPUT(-)	Input
4	NC	No connection
5	No.2 OUTPUT(-)	No.2 Output
6	NC	No connection
7	No.1 OUTPUT(+)	No.1 Output
8	NC	No connection
9	No.1 OUTPUT(-)	No.1 Output
10	POWER U(+)	Power Supply
11	POWER V(-)	

\* Specification is subject to change without notice