



This compact plug-in converter (pulse isolator) receives a pulse string 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 of up to 2000V between the signal input, output, and power supply.

Features

- ★ Dielectric strength of 2000Vac between input, output and power supply.
- ★ Isolated two signal outputs are available.
- ★ Both AC and DC power supply are available.
- ★ Easy maintain at plug-in structure.
- ★ RoHS conform.
- ★ Output modes can be selected with the DIP switch.

Ordering code

WSP- **FZ** - [] [] [] [] - [] []

Code	Input Signal
14	Voltage pulse Compatible with proximity switch and light switch [1]: 5 to 30V, [0]: -30 to 1.5V Input impedance: 20kΩ 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

*1...DIP switch must be kept at factory settings when code 99.

Code	Test Report
X	None
T	with Test report

Code	Power Supply
A	90 to 264Vac 50/60Hz
D	10.8 to 26.4Vdc
8	90 to 121Vdc

Code	Second Output Signal	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 2kΩ

Code	First Output Signal	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 : 620Ω
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 : 620Ω
N	Photo MOS relay Both AC and DC available Maximum output frequency 0.5Hz FS	Recommended circuit to be used : 100Vac, 2000Vdc 400Vac at peak, load current 0.5A or less Leakage current : 10μA at open
G	One-shot non-voltage contact output ON-time 100ms Maximum output frequency 5Hz FS	Rated control capacity : 24Vdc, 0.2A (max.) 100mVdc, 100μA (min.) 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%)
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) (in case of one-shot output, output signal becomes unstable for 1 pulse when power up or shutdown)
Operating temperature	-5 to +55°C
Operating relative humidity	90% or less (non-condensing)
Isolation	Between input, output, and power supply
Insulation resistance	100MΩ or more with a 500Vdc megger Between input, output, and power supply terminal
Dielectric strength	2000Vac for 1 minute
Power consumption	Approx. 4.5VA (AC), Approx. 60mA (24Vdc)
Dimension	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
4	INPUT(-)	
5	NC	No connection
8	NC	
9	OUTPUT(+)	Output
12	OUTPUT(-)	
13	POWER U(+)	Power Supply
14	POWER V(-)	