



This compact plug-in converter converts voltage or a DC signal into a pulse train signal having a frequency that is proportional to its input value. Lines are insulated between input, output, and power source.

## Features

- The output pulse supports various counters.
- Capable of eliminating small signals that are out of the effective measuring range
- Withstand voltage of 2000 V AC between input, output, and power source
- Both AC flexible power supply and DC power supply are available.
- This compact plug-in high-density mountable isolator allows the user to downsize the system.

## Model name

**WSP - V F** — [ ] — [ ] — [ ] — [ ] — 0- [ ] Hzfs  
 pulses/min fs Specify the output frequency.  
 pulses/h fs

**VF** Dielectric strength: 2000 V AC for 1 minute

Input Signal	Input Resistance
10	0-10 mV DC 1MΩ
11	0-100 mV DC 1MΩ
12	0-1 V DC 1MΩ
13	0-5 V DC 1MΩ
14	1-5 V DC 1MΩ
15	0-10 V DC 1MΩ
17	0-60 mV DC 1MΩ
31	0-100 μA DC 100Ω
32	0-1 mA DC 100Ω
33	0-10 mA DC 50Ω
35	0-20 mA DC 50Ω
36	4-20 mA DC 50Ω
99	Please contact us for other than those above. Voltage input: 10 mVfs-300 Vfs Current input: 10 μAfs-20 mAfs

Test Report	
X	No
T	Yes

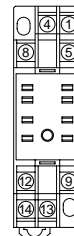
Supply Voltage	
A	90-264 V AC 50/60Hz
D	10.8-26.4 V DC
8	90-121 V DC

Output Signal	Rating
E	One-shot non-contact output For driving AC/DC electromagnetic counter ON-time 100 ms Maximum output frequency 5 Hzfs ON-voltage 2 V (max.) ON-current 500 mA or less Operating circuit voltage 200 V DC, 130 V AC or less
C	Open collector output 30 V DC, 30 mA or less ON-voltage 0.4 V or less
J	5V voltage pulse output [1]: 5 V, [0]: 0.4 V or less, internal resistance 620Ω
K	12V voltage pulse output [1]: 12 V, [0]: 0.4 V or less, internal resistance 620Ω
N	Photo MOS relay Both AC and DC available Maximum output frequency 0.5 Hzfs Recommended circuit to be used 100 V AC, 200 V DC 400 V AC at peak, load current 0.5 A or less Leakage current 10μA at open
G	One-shot non-voltage contact output ON-time 100 ms Maximum output frequency 5 Hzfs Rated control capacity 24 V DC, 0.2 A (max.) 100 mV DC, 100μA (min.) Contact life: 20 million times mechanically and a hundred thousand times electrically

## Specifications

**Accuracy:** ±0.1%fs (at 23°C)  
**Output frequency:** Output for Type E and G : 0.00278-5 Hzfs  
 Output for Type C, J, and K : 0.00278 Hzfs-32 kHzfs  
 Output for Type N : 0.00278 ~0.5 Hzfs  
**Response time:** 1 ms+1/output frequency  
 10 ms+1/output frequency for input of 1 Vfs and 20 mA or less,  
**Output waveform:** Output for Type E and G, one-shot output with ON-time of 100 ms  
 Output for Type C, J, K, and N, rectangular wave with approx. 50% duty  
**Monitor output:** For check of input, and zero and span adjustment of output ±5%fs  
**Zero & span adjustment:** ±5%fs  
**Operating temperature and humidity:** -5 to +55°C, 90% RH or less (without condensation)  
**Influence of ambient temperature:** ±0.15%fs/10°C  
**Isolation:** Between input, output, and power source terminals  
**Insulation resistance:** 100 MΩ or more with a 500 V DC megger  
 Between input, monitor output, output, and power source terminals  
**Dielectric strength:** 2000 V AC for 1 minute  
 Between input, monitor output, output, and power source terminals  
**Power consumption:** Approx. 4 VA (AC), approx. 50 mA (24 V DC)  
**Influence of source voltage:** ±0.1%fs in the range of rated voltage

**Dimensions:** 84(H)x23(W)x106.5(D)mm  
**Weight:** Approx. 130 g  
**Output shutdown:** This function forcibly cuts off output when the input signal falls below a preset value. The operation point is set to 0-10% by a trimmer. The operation can be monitored with an indicator on LED.  
**Reset:** Automatic reset works in 0.5 seconds after turning on the power.  
**Structure:** Plug-in (consisting of main unit and socket part)  
**Connection part:** 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  
**Dimensions:** Refer to Dimensional Drawing I  
**Terminal arrangement:**



No.	Symbol	Description
1	INPUT +	Input Signal
4	INPUT -	
5	MONITOR +	Monitor Output
8	MONITOR -	
9	OUTPUT +	Output Signal
12	OUTPUT -	
13	POWER U(+)	Power Supply
14	POWER V(-)	