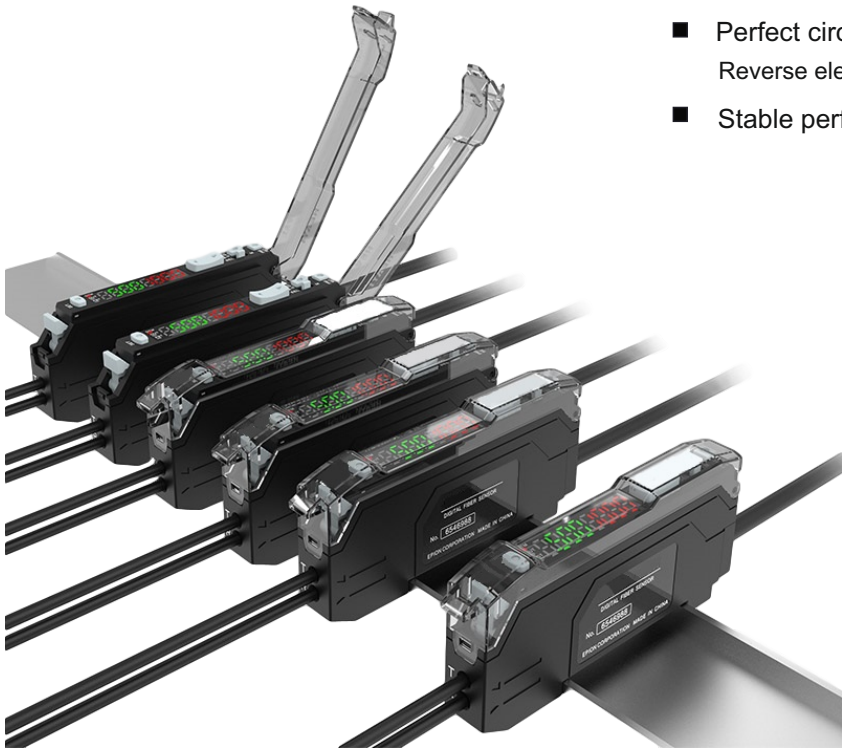
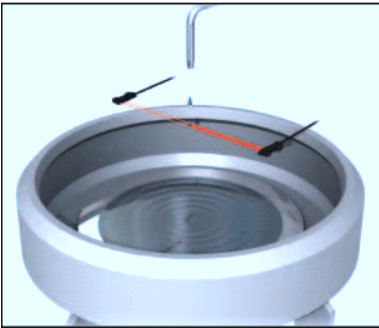


# High speed fiber sensor amplifier V5FM-E31

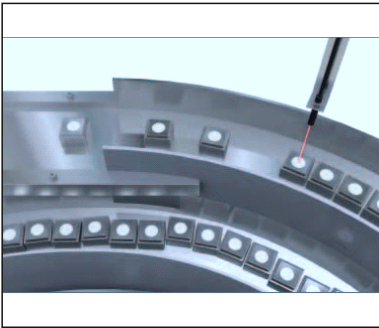


- Highlights
- Four speeds can be selected  
(MEGA\SUPER\FINE\HIGH SPEED) ;
- Functions:  
counting/zero point/percentage/Anti light interference/rising edge and falling edge DTM /value amplification/NO/NC interchange/time delay
- Max. speed 50μs;
- Perfect circuit protection;  
Reverse electrode, over-voltage and over-current protection.
- Stable performance, super cost performance.

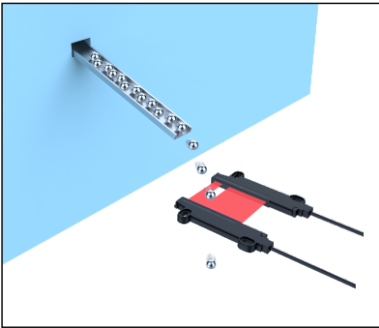
## Applications



Detecting falling water droplets



Detect the front and back of LED



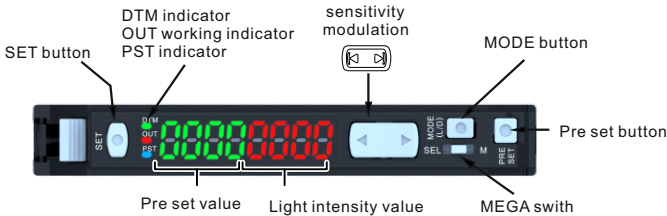
Accurate detection and counting of small objects in the region

## Product parameters

Model	NPN	V5FM-E31N
	PNP	V5FM-E31P
Conection		Cable
Light source		650nm red LED
Reaction time		Anti oFF: 50μs(HIGH SPEED) / 250μs(FINE) / 1ms(SUPER) / 16ms(MEGA)
Output		LIGHT-ON/DARK-ON
Delay function		Off delay timer / on delay timer / single time timer
Control output	NPN	NPN Open-collector 24V; Maximum output value: 100mA, residual Voltage 1.5V
	PNP	PNP Open-collector 24V; Maximum output value: 100mA, residual Voltage 1.5V
Protection circuit		Reverse electrode protection (power supply), over-current protection (output), over voltage protection (output)
Power voltage		Between 12 and 24VDC ± 10%, the fluctuation ratio (P-P) : max.10%.
Current consumption*	NPN	Normal: max.900mW(when 24V, max.20mA;when 12V:max.40mA) Energy saving mode: max.800mW(when 24V, max.18mA;when 12V:max.36mA)
	PNP	Normal: max.950mW(when 24V, max.20mA;when 12V:max.40mA) Energy saving mode: max.850mW(when 24V, max.18mA;when 12V:max.36mA)
Ambient brightness		incandescent lamp: max. 20,000lux, fluorescent lamp: max. 30,000lux
Ambient temperature		-20 to +55 no freezing
Ambient humidity		35 to 85%RH no condensing
Vibration resistance		10 to 55Hz, complex amplitude 1.5mm, each 2 hours for X/Y/Z axis
Impact resistance		500 m/s², each 3 times for X/Y/Z axis
Material		Polycarbonate
Dimensions		30.3mmX9.8mmX7.1.8mm
Weight		Approx. 66g

## Product functionality

Name of each part



## Product size

