# **V**<sub>5</sub> Group

# Ultrasonic edge sensor V5UN series

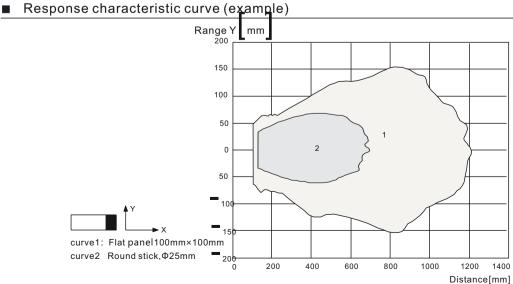
## Highlights

- The measurement is not affected by color, transparency, glossiness and ambient light;
- Smaller blind area and longer detection distance can be as far as 4m;
- With temperature compensation function and is not affected by ambient temperature;
- With synchronous function, multiple sensors are close to each other side by side without mutual interference;
- Strong anti-interference ability, enhance electromagnetic interference and radio frequency interference;
- With NPN, PNP switch output, and 4-20mA, 0-10vdc analog output;
- Completely free from dust, dirt and fog;
- Ultrasonic sensors can be widely used in many fields

Filling level and height sensing, interval measurement, coil diameter sensing, bottle counting, size measurement, material stacking height measurement, diameter and speed measurement, contour measurement, loop monitoring, quality inspection, distance monitoring, filling level measurement.

### Product parameters

Size		M18×1		M30×1.5	φ40+M30×1.5	φ73+M30×1.5
Switch output	NPN	V5UN18-05N	V5UN18-10N	V5UN30-20N	V5UNT40-40N	V5UNT73-60N
	PNP	V5UN18-05P	V5UN18-10P	V5UN30-20P	V5UNT40-40P	V5UNT73-60P
Analog output	4-20mA	V5UN18-05I	V5UN18-10I	V5UN30-20I	V5UNT40-40I	V5UNT73-60I
	0-10VDC	V5UN18-05U	V5UN18-10U	V5UN30-20U	V5UNT40-40U	V5UNT73-60U
Sensing range		50-500mm	100-1000mm	200-2000mm	300-4000mm	400-6000mm
Blin area		50mm	100mm	200mm	300mm	400mm
Standard object		100×100mm				
Working voltage		DC24V±10% ripple(P-P)max. 10%,No load current consumption 50mA				
Power on delay		500ms				
Output	switch output	When the output current of NPN or PNP is 100mA, the voltage drop under conduction state is less than 1V at 10mA and less than 1.5V at 100mA				
	analog output	Voltage output: 0-10VDC (load impedance R $\geq$ 1K $\Omega$ ). Current output: 4-20mA (load impedance R $\leq$ 500 $\Omega$ )				
Outpu	ut status		The NO / NC switch	output can be set by remote sett	ing line	
Response time		50ms	125ms	150ms	325ms	650ms
Setting mode		Setting (analog or switch): set the detection window range through remote setting line Increment or decrement output is determined by the set sequence Analog output slope: set the minimum output value (4mA or 0V) first				
Synchronization function		Synchronous use: multiple ultrasonic synchronous cables are connected together				
Detection accuracy		Analog resolution or switching value repetition accuracy: detection distance $\pm$ 0.5%. Analog linearity: $\pm$ 0.1% of full scale				
Analog resolution		Min. 0.13mm Min. 0.35mm				
Indicator green LED red LED		Switch and analog output action indicator:  NO mode:Green light on, red light off = output. Green light off, red light on = no output  Ncmode: green light off, red light on = output. Green light on, red light off = no output  Analog output mode: green light on, red light off = output. Green light off, red light on = no output  Flashing green light = setting memory position and setting function memory  Red light flashing = setting memory position failed and setting NC function memory  Green light and red light flashing alternately = setting function memory failure				
Ambient temperature		Working: -20~+60°C Storage: -25~+70°C				
Ambient humidity		Working: 35~85%RH, Storag: 35~95%RH				
Connection		2m cable ; M12 connector , cultrsonic : M12 connector				
IP level		IEC IP65				



# Ultrasonic sensors