

YC-A150T 1, 2 or 3 axes Accelerometer

Features:

- Capacitance MEMS principle DC accelerometer
- Low noise: 45 ug/Hz (range is +-2 g)
- 0.5 ~ 4.5 V single ended or ± 4 V differential output
- 40-85 °C temperature
- 9 ~ 15 V DC voltage
- Less than 100 Ω output impedance
- Epoxy resin sealing
- Can be customized within ± 15 g all range



Performance Specification:

(Unless otherwise specified, the specification is under the test condition 12 V DC power supply voltage, temperature 25 degree C)

parameter	Min.		Type	Max	Unit
Measuring range	± 2			± 13	g
Zero error	2.45		2.5	2.55	V
Zero temperature drift			± 1.0		mg/ \square
Sensitivity ⁽¹⁾	$\pm 2g$	970	1000	1030	mV/g
	$\pm 5g$	377	400	403	
	$\pm 13g$	145	150	155	
Sensitivity temperature drift			± 0.02		%/ \square
Zero offset error ratio			$\pm 0.2(XY)$ $\pm 0.1(Z)$		%
Sensitivity error ratio			$\pm 1.6(XY)$ $\pm 0.2(Z)$		%
nonlinearity			0.1		%FS
horizontal axis sensitivity			2.0		%
Band width(-3dB) ⁽²⁾	0 (DC)		800		Hz
error	$\pm 2g = \pm 45$			$\pm 13g = \pm 100$	ugVHz
size	length*width*height: 33*33*13				mm

Note: ⁽¹⁾ According to the measuring range choose corresponding sensitivity

⁽²⁾ Internal 1 KHz low-pass filter, lower pass band need external increase capacitance

Electrical specification:

(Unless otherwise specified, the specification is under the test condition 12 V DC power supply voltage, temperature 25 °C)

parameter	Min.	Type	Max	Unit
Power supply voltage	9	12	15	V (DC)
consumption	3	5	7	mA
Output impedance	0		100	Ω

Environment specification:

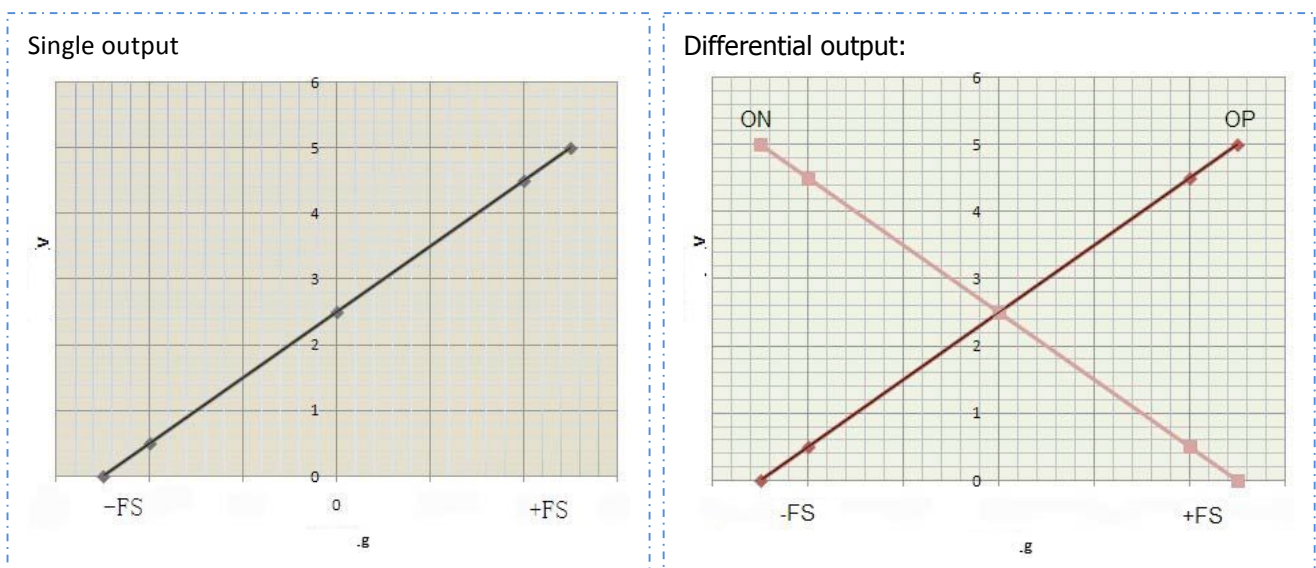
parameter	Min.	Type	Max	Unit
Working temperature	-40	-	85	°C
Storage temperature	-55	-	125	°C
Anti-shock	-	-	2500	g/0.5ms

Connection definition:

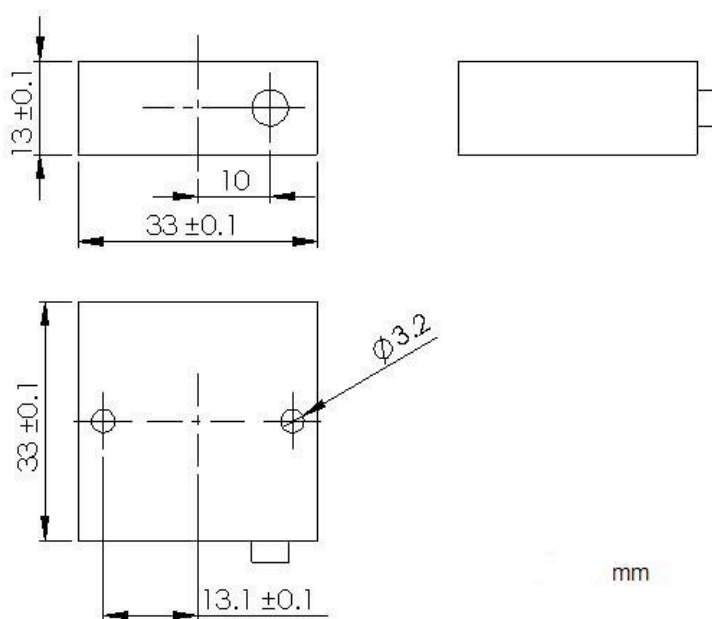
	RED	BLACK	YELLOW	BLUE	GREEN	WHITE	BROWN	GREY	PURPLE	transparent
single	+9~15V	GND	Xout	NC	Yout	NC	Zout	NC	NC	NC
Differential	+9~15V	GND	+ XOP	-XON	+ YOP	-YON	+ ZOP	-ZON	NC	NC

Note: wire impedance 0.23 ohms/m.

Outputs curves:



Size:



Order information:

The accelerometer can be supplied in 1, 2 or 3 axis, as single ended or differential model

Measuring range	output		Remark
	Single	Differential	
±2g	YC-A150x-02S	YC-A150x-02D	'x'=A(single); 'x'=D(dual axis); 'x'=T(three angle)
±13g	YC-A150x-13S	YC-A150x-13D	

Warranty:

1 year warranty of the product from the date of original shipment , but the damage caused for the following reasons not in the guaranteed scope:

- A) human remove modification;
 - B) fails to manual within the specified range use (such as power supply voltage overrun, short circuit, etc.).
- 2, in order to avoid influence your work, when the product have problem, please contact us as soon as possible, we will provide you high quality and efficient service.
- 3, the company reserves the right to improve product, product specifications and design are subject to change without notice.