

High overload resistant Inertial measurement unit BS-IC01G-M

1. Product Introduction:

BS-IC01G-M Inertial measurement unit is a high-performance, small volume, high overload resistant inertial measurement equipment, which can be used for navigation, motion control and dynamic measurement. This series of products has high reliability and rigidity, and can still accurately measure the angular velocity and acceleration information of the moving carrier in harsh environments.

BS-IC01G-M has the characteristics of low power consumption, wide operating temperature range, wide bandwidth, small size, and fast startup. It can be widely used in aircraft guidance and control, engineering equipment control, platform stability, robot, antenna stability and other systems.

2. Product features:

Small volume and high overload resistance

Full temperature -40 °C to +85 °C operation

Optional analog and digital outputs

Wide range and fast start

Integrated three-axis geomagnetic sensor

List of standart models:

BS-IC01G-M1-1A

BS-IC01G-M1-1B

BS-IC01G-M1-2A

BS-IC01G-M1-2B

BS-IC01G-M2-1A

BS-IC01G-M2-1B

BS-IC01G-M2-2A

BS-IC01G-M2-2B

Product code:

BS-IC01G-MZ-xy

BS - BLITZ Sensor

IC01G - Series

M - multiaxial

Z - refers to size (see page No.2)

x - gyro parameters (1 - +-10000 deg/s; 2 - +-400 deg/s)

y - accelerometer parameters (A - +-200 g, B - +-100 g)

Note: it is possible to make products with different ranges.

3. Main performance

Parameters		Unit	Value	
Model		BS-IC01G-M		
activation time		s	≤1	
Gyro	Range	deg/s	±400~±10000 optional	
	Zero bias	deg/s	≤±1 (10000)	≤±0.3 (±400)
	Zero bias stability	deg/h	≤50	≤18
	Zero bias repeatability	deg/s	≤50	≤18
	Nonlinearity	%	≤0.1	≤0.1
Accelerometer	Range	g	±10~±400; optional	
	Zero bias	mg	≤50@200; ≤25@100;	
	Zero bias stability	mg	≤1@200; ≤4@100;	
	Zero bias repeatability	mg	≤1@200; ≤4@100;	
Reliability (expectation)		Kh MTBF	10	
Interface	Power supply	V	DC9-36	
	Power consumption	W @5V DC	≤0.8	≤0.8

	Interface	Analog 0-5V	Digital RS422	Digital RS422
		Data update rate (can be set)	---	400 (Hz@460800)
Usage environment	working temperature	°C	-40~+70	-40~+70
	Storage temperature	°C	-55~+85	-55~+85
	Vibration	g @ 20~2000 Hz	6	6
	Impact	g , 0.5 ms, 1/2 Sine	15000	15000
physical characteristics	Size	mm		
	Weight	g	≤100	≤100

Ordering:

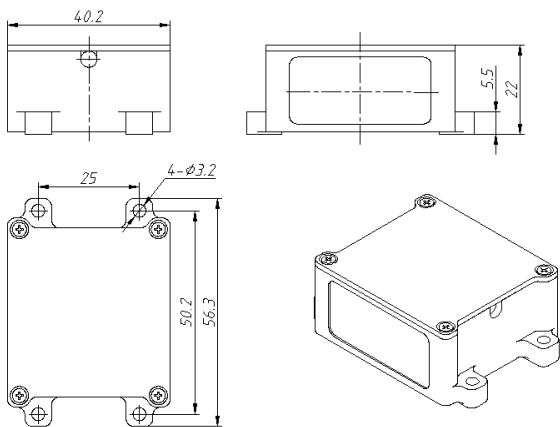
The order code consists of the series number and size number. Please refer to the part numbers and drawing below:

Series number: BS-IC01G-

Size number: -M1-D6EC / -M2-D6EC

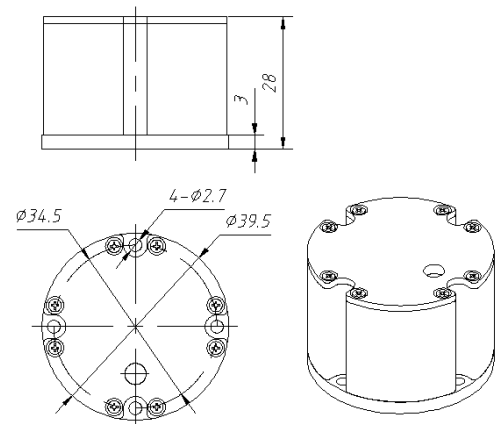
BS-IC01G-M1-D6EC

Size 1 (40.2×56.3×22mm)



BS-IC01G-M2-D6EC

Size 2 (39.5×39.5×28mm)



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BS-IC01G-M1-1A

BS-IC01G-M1-1B

BS-IC01G-M1-2A

BS-IC01G-M1-2B

BS-IC01G-M2-1A

BS-IC01G-M2-1B

BS-IC01G-M2-2A

BS-IC01G-M2-2B

Note: it is possible to make products with different ranges.