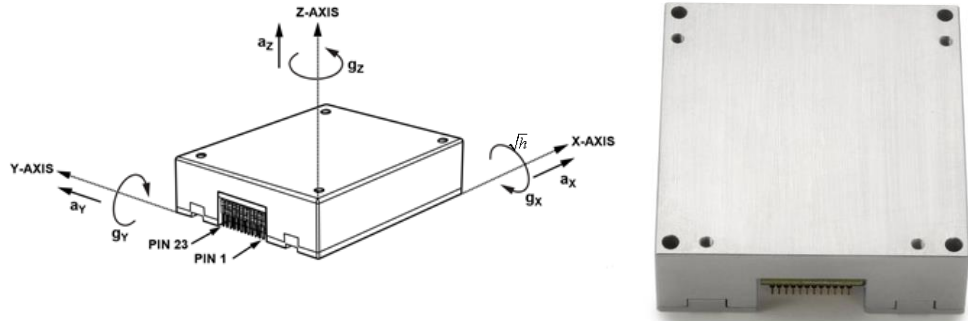
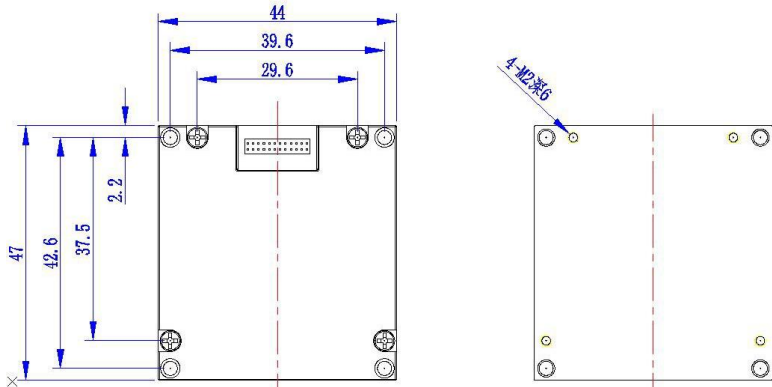


# 16488-C MEMS IMU



16488-C is a domestic MEMS IMU used to replace ADIS16488. The product precision is better than ADIS16488. The version is optional, the size and appearance are exactly the same, and the communication protocol is the same. The version is optional, the size and appearance are exactly the same, and the communication protocol is the same. It is more convenient for users to change, providing users with professional product customization services.



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Parameter		Conditions	16488-C	ADIS16488	unit	
Gyro	Dynamic measuring range	configurable	± 450	± 480	°/s	
	Bias instability	Allan	3.5	5.1	°/h	
	bias stability	1s, rms	30	/	°/h	
	bias in full temperature range	-40°C~85°C,10s, rms	0.02	/	°/s	
	Random walk	16	0.25	0.26	°/√h	
	bias repeatability	16	35	/	°/h	
	output noise	No filtering, rms	0.09	0.135	°/s	
	Scale factor repeatability	16	0.02	1.0	%	
	Scale factor Temperature coefficient	-40°C~85°C, 16	5	± 35	ppm/°C	
	The scale factor is nonlinear	FS=450°/s	0.008	0.01	%FS	
	bandwidth (-3dB)		330	330	Hz	
	Accelerometer	Dynamic measuring range	Configurable (Max ±40)	±20	± 18	g
		bias stability	Allan error	0.005	/	mg
bias in full temperature range		-40°C~85°C,10s, rms	0.5	16	mg	
Random walk		16	0.01	0.029	m/s/√h	
Bias instability		16	0.16	/	mg	
output noise		No filterin, rms	1	/	mg	
Scale factor repeatability		16	0.01	0.5	%	
scale factor is nonlinear		FS=10g	0.002	0.1	%FS	
bandwidth (-3dB)			330	330	Hz	
Cross coupling			0.18	/	%	
Magnetometer	Dynamic measuring range		± 2.5	± 2.5	gauss	
	The sensitivity		0.1	0.1	mgauss/LSB	
	nonlinearity		0.5	0.5	%FS	
Barometer	Pressure range		1100	1100	mbar	
	sensitivity		$6.1 \times 10^{-7}$	$6.1 \times 10^{-7}$	mbar/LSB	
	Total error		4.5	4.5	mbar	
	The relative error		2.5	2.5	mbar	
	nonlinearity		0.1	0.1	%FS	
Communication interface	1 way SPI	Input clock frequency	15	15	MHz	
	1 way UART	Baudrate	230.4	/	kbps	
	1 way CAN			/	kbps	
Electrical characteristics	voltage	dc	3.3 (or5) ± 10%		V	
	Power consumption		0.6	1	W	
	ripple wave	P-P		100	mV	
Environment	working temp.	extensible		85	°C	
	Store temp			85	°C	
	vibration		10~2000Hz, 6.06g			
impact		5000g, 0.1ms				