YMC® PIEZOTRONICS INC

Sensors, Shakers & Instruments

Our Products:

- ◇ Vibration Accelerometers
- ◇ Vibration Velocity Sensors;
- ◇ Vibration Displacement(Eddy) Sensors
- ◇ Quartz Dynamic Force Sensors
- ◇ Quartz Dynamic Pressure Sensors
- ◇ Signal Conditioners
- ◇ Data Acquisition Systems
- ◇ Power Amplifiers
- ◇ Modal Shakers
- ◇ Small Vibrators
- ◇ Vibration Calibrators

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1. Piezoelectric Vibration Accelerometers

1.1. High Shock Accelerometers

YMC series piezoelectric shock accelerometers are specifically designed to withstand and measure extreme,high-amplitude,sh or t-duration,transient accelerations. With high stiffness, quick response, high g value; Applied in drop test, impact testing, explosive studies etc. Measurement ranges from from 1000g's to 100000 g's.

1.1.1. Charge Output Model（PE） Accelerometers

General Shock 222A02	High Shock 211A01/Z,211A02/Z,211A05/Z	High Shock, Isolation 211A01G,211A02G,211A05G	Tri-axial shock: 247A01、247A02
	 		

Model:YMC		222A02	211A01/Z 211A01G	211A02/Z 211A02G	211A05 211A05G	211A10/Z 211A10G	247A01	247A02
Sensitivity	pC/g	5.0	0.50	0.20	0. 1	0.05	1.00	0.50
Measuring Range	g pk	±5000	±10000	V±20000	±50000	±100000	±5000	±10000
Non-linearity	%	±5	±5	±10	±10	±10	±5	±5
Frequency Range (±1dB)	Hz	1-10,000	1-12,000 1-10,000	1-12,000 1-10,000	1-12,000 1-10,000	1-12,000 1-10,000	1- 8,000	1-8,000
Resonant Frequency	kHz	40	40	40	40	40	30	30
Temperature Range	℃	-20 - +70	-20 - +70	-20 - +70	-20 - +70	-20 - +80	-20 - +80	-20 - +80
Sensing Element		Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear
Output Connect or		Integral Cable	Integral Cable	Integral Cable	Integral Cable	Integral Cable	Integral Cable	Integral Cable
Electrical Ground Isolation	Ω	-	- $\geq 10^9$	- $\geq 10^9$	- $\geq 10^9$	- $\geq 10^9$	External Isolation	External Isolation
Housing Material		High Strength Stainless Steel	High Strength Stainless Steel Titanium	High Strength Stainless Steel Titanium	High Strength Stainless Steel Titanium	High Strength Stainless Steel Titanium	High Strength Stainless Steel	High Strength Stainless Steel
Sealing		Epoxy Glue	Welding	Welding	Welding	Welding	Epoxy Glue	Epoxy Glue
Weight	g	12.5	10	10	10	10	40	40
Size	mm	Φ15×18	Φ13.2×25 Φ13.2×28	Φ13.2×25 Φ13.2×28	Φ13.2×25 Φ13.2×28	Φ13.2×25 Φ13.2×28	22×22×15	22×22×15
Mounting		M5	M6×0.75 - 8	M6×0.75 - 8	M6×0.75 - 8	M6×0.75 - 8	2-M4(holes)	2-M4(holes)

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1.1.2. IEPE Output Model（IEPE） Accelerometers

General Shock 121A01,121A02,121A05	High Shock 111A01/Z,111A02/Z,111A05/Z	High Shock, Isolation 111A01G,111A02G,111A05G,
	 	

Model:YMC		121A01	121A02	121A05	111A01/Z	111A02/Z	111A05/Z
					111A01G	111A02G	111A05G
Sensitivity	mV/g	1.0	2.0	5.0	0.50	0.25	0.10
Measuring Range	g pk	± 5000	± 2500	± 1000	± 10000	± 20000	± 50000
Resolution	mg rms	20	10	5	50	100	200
Frequency Range（±1dB）	Hz	1 - 10,000	1 - 10,000	1 - 10,000	1 - 12,000	1 - 12,000	1 - 12,000
					1 - 10,000	1 - 10,000	1 - 10,000
Resonant Frequency	kHz	40	40	40	40	40	40
Temperature Range	℃	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-20 - +80	-20 - +80
Sensing Element		Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear	Ceramic Shear
Output Connect or		M5	M5	M5	M5	Integral Cable	Integral Cable
Electrical Ground Isolation	Ω	-	-	-	-	-	-
					≥10^9	≥10^9	≥10^9
Housing Material		High Strength Stainless Steel	High Strength Stainless Steel	High Strength Stainless Steel	High Strength Stainless Steel	High Strength Stainless Steel	High Strength Stainless Steel
					Titanium	Titanium	Titanium
Sealing		Epoxy Glue	Epoxy Glue	Epoxy Glue	Welding	Welding	Welding
Weight	g	11.5	11.5	11.5	10	10	10
尺	mm	Φ13.5×21	Φ13.5×21	Φ13.5×21	Φ13.2×26	Φ13.2×26	Φ13.2×26
					Φ17×26	Φ17×26	Φ17×26
Mounting		M5	M5	M5	M5	M5	M5

Remakr about high shock accelerometers:
1, Model suffix G:refers to the housing electrical isolation, all are integral cablea output;
2, Model suffix Z:Integral Cable output mode with1 m lengths;
3,Advices:Over 10000 g , choose Integral Cable output mode;

1.2. General Purpose Accelerometers

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YMC series general-purpose accelerometers are designed by piezoelectric effect principle; Two output mode:high impedance output type (PE Mode) and low impedance voltage output type (IEPE Model). YMC series general accelerometers are applied for vibration testing of product structure, vibration control, drop test, quality assurance, mechanical equipment, vibration modal testing etc.

1.2.1. General,Signal AxialCharge Output Mode（PE）Accelerometers

General,Signal Axial,Top Output: 221ASeries:Charge Output Mode（PE） 121ASeries:Voltage Output Mode（IEPE）	General,Signal Axial,Side Output: 222ASeries:Charge Output Mode（PE） 122ASeries:Voltage Output Mode（IEPE）	Single axial and high stability YMC2106C:Charge Output Mode Please see:Model 222A25,
		

Model:YMC			221A10	221A25	221A50	221A100	221A200	221A500	221A1000
			222A10	222A25	222A50	222A100	222A200	222A500	222A1000
Sensitivity		pC/g	10.0	25	50	100	200	500	100
Measurment Range		g pk	±5000	±2000	±1000	±800	±500	±150	±80
Frequency Range	±5%	Hz	2 - 10k	2 - 8k	1 - 8k	0.5 - 8k	0.5 - 5k	0.5 - 4k	0.3 -2.5k
	±10%	Hz	1-12k	1-10k	0.5 - 10k	0.3 - 10k	0.3 - 8k	0.2 -5k	0.1 – 3.5k
Resonant Frequency		kHz	40	30	25	25	20	15	10
Temperature Range		℃	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150
Sensing Element			Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear
Output Type			M5/Top	M5/Top	M5/Top	M5/Top	M5/Top	M5/Top	TNC/Top
			M5/Side	M5/Side	M5/Side	M5/Side	M5/Side	M5/Side	M5/Side
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing			Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight		g	9.5	9.5	18	18	28	40	108
			12	12	20	20	30	57	115
Size		mm	Φ13×17	Φ13×25	Φ13×28	Φ13×25	Φ13×25	Φ13×25	Φ26×26.5
			Φ13×20	Φ13×20	Φ13×23	Φ13×20	Φ13×20	Φ13×20	Φ28×25
Mounting			M5	M5	M5	M5	M5	M5	M5

1.2.2. General,Signal Axial ,Voltage Output Mode（IEPE）Accelerometers

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Model:YMC			121A10	121A20	121A50	121A100	121A200	121A500	121A1000
			122A10	122A25	122A50	122A100	122A200	122A500	122A1000
Sensitivity		mV/g	10	20	50g	100	200	500	1000
Measurment Range		g pk	±500 g	±250 g	±100 g	±50 g	±25 g	±10 g	±5 g
Resolution		mg rms	2.5	1.5	1	0.5	0.2	0.1	0.05
Frequency Range	±5%	Hz	1 – 10k	1 – 10k	1 – 8k	1 – 8k	0.5 – 6k	0.5 – 3k	0.3 – 2k
	±10%	Hz	2 – 12k	2 – 12k	0.5 – 10k	0.5 – 10k	0.3 – 8k	0.3 – 3.5k	0.2 – 2.5k
Resonant Frequency		kHz	40	40	30	25	15	15	10
Temperature Range		℃	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connect or		Ω	M5/Top	M5/Top	M5/Top	M5/Top	M5/Top	M5/Top	TNC/Top
			M5/Side	M5/Side	M5/Side	M5/Side	M5/Side	M5/Side	M5/Side
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing			Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight		g	9.5	9.5	18	18	28	40	77
			12	12	20	20	30	57	60
Size		mm	Φ13.2×23	Φ13.2×23	Φ15.6×25.4	Φ15.6×25.4	Φ20×35	Φ20×35	Φ22×42
			Φ13.5×17	Φ13.5×17	Φ15.6×22	Φ15.6×22	Φ20×30	Φ20×30	Φ20×30
Mounting			M5	M5	M5	M5	M5	M5	M5

1.2.3. Tri-axial Charge Output Mode（PE）Accelerometers

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242A02 Series

243A Series

245A Series

Model:YMC			242A02	242A05	243A10	243A20	245A10	245A20	245A50
Sensitivity		pC/g	2	5	10	20	10	20	50
Measurment Range		g pk	±2000	±2000	±1000	±1000	±2000	±1000	±1000
Frequency Range	±5%	Hz	1- 6k	1-6k	1 - 5k	0.5 - 5k	0.5 - 5k	0.5 - 3k	0.5 - 2k
	±10%	Hz	0.5 - 8k	0.5 - 8k	0.5 - 6k	0.5 - 6k	0.3 – 6.5k	0.3 – 4.5k	0.3 – 3k
Resonant Frequency		kHz	25	25	20	20	20	10	8
Temperature Range		℃	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic/Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connector			3-M5	3-M5	3-M5	3-M5	3-M5	3-M5	3-M5
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing			Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight		g	37	37	44	44	44	44	44
Size		mm	22×22×10	22×22×10	25.4×22×13	25.4×22×13	25.4×25.4×14	25.4×25.4×14	25.4×25.4×14
Mounting			2 – M4(holes)	2 – M4(holes)	2 – M4(holes)	2 – M4(holes)	Φ5(holes)(Z) 2-M5(X,Y)	Φ5(holes)(Z) 2-M5(X,Y)	Φ5(holes)(Z) 2-M5(X,Y)

1.2.4. Tri-axial Voltage Output Mode（IEPE）Accelerometers

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General,Tri-axial IEPEOutput: 143A Series	General,Tri-axial IEPEOutput: 145A Series	General,Tri-axial IEPEOutput: 145A200
		

Model:YMC			143A10	143A20	143A50	145A10	145A20	145A50	145A100	145A200
Sensitivity		mV/g	10	20	50	10	20	50	100	200
Measurment Range		g pk	±500	±250	±100	±500	±250	±100	±50	±25
Resolution		mg rms	2.5	1.5	1	0.5	0.2	0.1	0.05	0.15
Frequency Range	±5%	Hz	1 - 5k	0.5 - 5k	0.5 - 5k	0.5 - 5k	0.5 - 3k	0.5 - 2k	0.5 - 2k	0.3 – 500
	±10%	Hz	0.5 - 6k	0.5 - 6k	0.5 - 6k	0.3 – 6.5k	0.3 – 4.5k	0.3 – 3k	0.3 – 3k	0.2 – 800
Resonant Frequency		kHz	20	20	20	15	15	15	10	10
Temperature Range		℃	-40 - +121	-40- +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +85
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connect or			1/4-28	1/4-28	1/4-28	3-M5	3-M5	3-M5	3-M5	X12J6A
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	LY12
Sealing			Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight		g	40	40	45	45	45	45	45	355
Size		mm	25.4×22×11	25.4×22×11	25.4×22×11	25.4×25.4×14	25.4×25.4×14	25.4×25.4×14	25.4×25.4×14	65×50×50
Mounting			2-Φ2.5	2-Φ2.5	2-Φ2.5	2 – Φ4(holes)	M5	M5	M5	M5

✧ **Remark abouy YMC145A200:**Power Supply :±4VDC - ±15VDC;

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1.3. High Sensitivity, low-level Accelerometers

YMC Series High Sensitivity Accelerometers are specifically designed to enable the detection of ultra-low-level,low frequency vibrations;Applications for :bridge structure test, vibration monit or ing, earthquake monit or ing and early warning, ground and foundation vibration monit or ing, geological structure research, and other areas of the low vibration level, low frequency vibration.

High Sensitivity,Top Output: 131ASeries:IEPE output	High Sensitivity,Side Output: 132ASeries:IEPEoutput 232ASeries:Charge output	High Sensitivity, Tri-axial: 146A Series:IEPE output
		

Model:YMC		131A01	131A05	132A01	132A02	132A05	132A10	232A02	146A01
Sensitivity	V/g	1.0	5.0	1.0	2.0	5.0	10.0	2000pC/g	1.0
Measurment Range	g pk	±5.0	±1.0	±5.0	±2.5	±1.0	±0.5	±50	±5.0
Resolution	mg rms	0.1	0.02	0.1	0.05	0.02	0.01	-	0.1
Frequency Range ±5%	Hz	0.5 – 1k	0.5 – 800	0.3 – 800	0.3 – 750	0.3 – 500	0.3 – 500	0.05 – 800	0.5 – 300
Frequency Range ±10%	Hz	0.2 – 2k	0.1 – 1.5k	0.1 – 1k	0.1 – 1k	0.1 – 800	0.1 – 800	0.1 – 1.2k	0.2 – 500
Resonant Frequency	kHz	3.5	3.5	3.5	3	2.5	2.5	3	1.5
Temperature Range	℃	-40 - +121	-40- +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-54 - +150	-40 - +121
Sensing Element		Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connector		TNC	TNC	M5	M5	M5	M5	M5	4 pinM12X1
Electrical Ground Isolation	Ω	Housing Isolation $\geq 10^9$	Housing Isolation $\geq 10^9$	Base Isolation $\geq 10^9$	Base Isolation $\geq 10^9$	Base Isolation $\geq 10^9$	Base Isolation $\geq 10^9$	Base Isolation $\geq 10^9$	Housing Isolation $\geq 10^9$
Housing Material		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing		Welding	Welding	Welding	Welding	Welding	Welding	Welding	Welding
Weight	g	185	185	180	180	280	280	200	320
Size	mm	Φ32×66	Φ32×66	Φ37×32	Φ37×32	Φ44×53	Φ44×53	Φ40×48	75×75×38
Mounting		M6	M6	M5	M5	M8	M8	M5	M5

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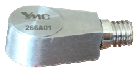
1.4. Miniature Accelerometers

YMC Series Miniature Accelerometers are designed with small size and light Weight; Applications:circuit boardstesting, small structure testing, drop testing, component testing and modal testing etc, which can effectively reduce the influence of added mass of the test structure.

1.4.1. Miniature Signal axial Charge Output Mode（PE）

Top M5 Output: 261A05:Charge Mode 	Side M5 Output: 262A05:Charge Mode 	Top M5 Output: 263A03:Charge Mode 	TopIntegral Cable: 263A03Z:Charge Mode 
SideM3Output: 264A05:Charge Mode 	SideIntegral CableOutput: 264A05:Charge Mode 	SideM3Output: 266A01:Charge Mode 	SideIntegral CableOutput: 266A01Z:Charge Mode 

Model:YMC		261A05	262A05	263A03	264A03	266A01
				263A03Z	264A03Z	266A01Z
Sensitivity	pC/g	5	5	3	3	1
Measurment Range	g pk	±2000	±2000	±3000	±3000	±2000
Frequency Range ±5%	Hz	1 - 8k	1 - 8k	1 - 10k	1 - 10k	2 - 12k
Frequency Range ±10%	Hz	0.5 - 10k	0.5 - 10k	0.5 - 12k	0.5 - 12k	1 - 15k
Resonant Frequency	kHz	45	30	45	45	50
Temperature Range	℃	-54 - +150	-54 - +150	-54 - +150	-54 - +150	-54 - +150
Sensing Element		Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear
Output Connector		M5	M5	M5	5-44（ or M3）	5-44（ or M3）
				Inntegral Cable M5	Inntegral Cable M5	Inntegral Cable M5
Housing Material		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing		Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight	g	3.2	6.2	5	5	1.7
Size	mm	Φ11×10	10×10×10	Φ8×15	Φ6.5×10.5	5×12 ×7
Mounting		Gule	Gule	M5/Gule	M3/Gule	Gule

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1.4.2. Signal Axial, low impendance output Mode（IEPE）

Top M5 Output: 161A Series:IEPE Mode	Side M5 Output: 162A Series:IEPE Mode	Top M5 Output: 163A10:IEPE Mode	Integral Cable Output: 163A10Z:IEPE Mode	Side M3 Output: 164A10:IEPE Mode	Integral Cable Output: 164A10Z:IEPE Mode
					

型　号:YMC			161A10	161A50	161A100	162A10	162A50	162A100	163A10	164A10
									163A10Z	164A10Z
Sensitivity		mV/g	10	50	100	10	50	100	10	10
Measurment Range		g pk	±500	±100	±50	±500	±100	±50	±500	±500
Resolution		mg rms	10	2	1	10	2	1	10	10
Frequency Range	±5%	Hz	0.5 - 8k	0.5 - 8k	0.5 - 8k	0.5 - 8k	0.5 - 8k	0.5 - 8k	1 - 10k	1 - 10k
	±10%	Hz	1-10k	1-10k	1-10k	1-10k	1-10k	1-10k	0.5 - 12k	0.5 - 12k
Resonant Frequency		kHz	40	40	40	30	30	35	45	45
Temperature Range		℃	-40 - +121	-40- +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connect or			M5	M5	M5	M5	M5	M5	M5	M3
									Inntegral CableM5	Inntegral CableM5
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing			Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight		g	7.5	7.5	7.5	7.0	7.5	7.5	5	5
Size		mm	Φ12.7╳15	Φ12.7╳15	Φ12.7╳15	10╳10╳10	10╳10╳10	10╳10╳10	Φ8╳15	Φ8╳12.5
Mounting			Gule	Gule	Gule	Gule	Gule	Gule/M3	Gule /M5	Gule/M3

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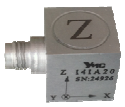
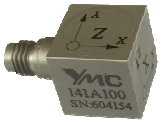
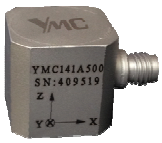
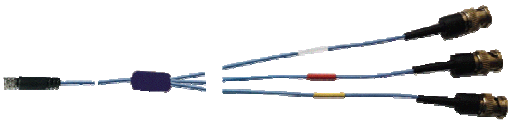
1.4.3. Miniature, Tri-axial Low Impedance Output Mode（IEPE）

Miniature Tri-axial IEPE,Side output 141A10,141A 20	Miniature Tri-axial IEPE,Side output 141A50,141A100	Miniature Tri-axial IEPE,Side output 141A200,141A 500
		

Model:YMC			141A10	141A20	141A50	141A100	141A200	141A500
Sensitivity		mV/g	10	20	50	100	200	500
Measurment Range		g pk	±500	±250	±100	±50	±25	±10
Resolution		mg rms	10	6	2	1	0.5	0.2
Frequency Range	±5%	Hz	2 – 4k	2 – 4k	2 – 4k	1 – 4k	1 – 1.5k	1 – 1.5k
	±10%	Hz	1 – 5k	1 – 5k	1 – 5k	0.5 – 5k	0.5 – 2k	0.5 – 2k
Resonant Frequency		kHz	30	30	25	25	20	15
Temperature Range		℃	-40 - +121	-40- +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Connect or			1/4-28 4 pin	1/4-28 4 pin	1/4-28 4 pin	1/4-28 4 pin	1/4-28 4 pin	1/4-28 4 pin
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Sealing			Welding	Welding	Welding	Welding	Welding	Welding
Weight		g	8.5	8.5	19.5	19.5	35	35
Size		mm	10.5×10.5 ×10.5	10.5×10.5 ×10.5	14×14×14	14×14×14	18×18×18	18×18×18
Mounting			Gule	Gule	M5	M5	M5	M5



Cables with Miniature Tri-axial IEPEAccelerometers

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1.5. Industrial Accelerometers with Temperature output

YMC Series industrial accelerometers are designed by rugged, stainless steel vibration monit or ing Sensor s for predictive maintenance applications. All YMC Sensor s are hermetically sealed, case isolated, laser welding sealing, waterproof, prevent oil design; Suitable for the industrial field environment under long-term stable and reliable w or k;

1.5.1. Industrial Accelerometers (IEPE output mode)

Top output 151A100D	Side output 151A100C	Top output 151A500D	Side output 151A500C
			

Model:YMC			151A100D	151A100C	151A500D	151A500C
Sensitivity		mV/g	100±10%	100±10%	500±10%	500±10%
Measurment Range		g pk	±50	±50	±10	±10
Max. shock accelerations		g pk	±3000	±3000	±500	±500
Resolution		mg rms	0.5	0.5	0.1	0.1
Excitation voltage		VDC	18 - 30	18 - 30	18 - 30	18 - 30
Constant current		mA	2 - 10	2 - 10	2 - 10	2 - 10
DC offset		VDC	11±1.5	11±1.5	11±1.5	11±1.5
Frequency Range	±10%	Hz	2 - 10k	2 - 6k	0.6 - 6k	0.6 - 3k
	-3dB	Hz	0.5 - 15k	0.5 - 10k	0.1- 10k	0.1- 4.5k
Resonant Frequency		kHz	23	20	16	14
Temperature Range		℃	-54 - +121	-54 - +121	-54 - +121	-54 - +121
Sensing Element			Ceramic/Shear	Ceramic/Shear	Ceramic/Shear	Ceramic/Shear
Output type			2 pin MIL-C-5015	2 pin MIL-C-5015	2 pin MIL-C-5015	2 pin MIL-C-5015
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Housing Isolation		Ω	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$
Sealing			Welding	Welding	Welding	Welding
Weight		g	45	72	80	130
Size		mm	Φ22×45	30L×18W×21H	Φ25.4×55	36L×23W×25H
Mounting			1/4-28	M6	1/4-28	M6

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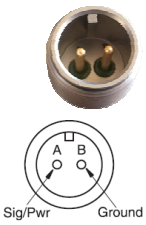
✧ **Industrial Accelerometers outputtype and cables:**

Output Cables and mounting types:

MIC-C-5015 Output socket	Normal Cables	Armoured Cable	MIC-C-5015 plug（Bend）	Side output with screw and base（Customized）	Output
					 Red:Signal output Black:Signal Ground Outer shield:Connect to house

1.5.2. Vibation Accelerometers with Temperture

YMC series Temperature/acceleration Sensor s integrated temperature Sensor and Single Axis/Triaxial accelerometers. Whole sealing, moistureproof, dustproof, high reliability.

Side output with integral Cable YMC154AT50C/YMC154AT100C	Top output with Integral Cable YMC154AT50D/YMC154AT100D	Tri-axial Accelerometer with Temperture YMC156AT50D/YMC156AT100D
		

Compound Sensor main parameters:

Cceleration Measuring Range:±50 g - ±100 g
Operating mode:IEPE
Temperture output:10mV/℃（-20 - +120℃）;
Digital Temperture Output:-55 - +125℃
or PT-100:-55 - +250℃;
Mounting:M12 or other types;
outputtype:Integral Cable or socket.

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1.5.3. Accelerometers for Handheld vibration meters

YMC 152A Series of Accelerometers are designed for various handheld vibration meters;YMC152A100L' excitation voltage is low to 5 VDC, the DC offset is 2.0V), it is suitable for a battery-powered instrument. Low power consumption, strong anti-interference ability, matching and customize the c or responding magnetic bridge, easy to carry and installation;YMC153A ,dc power supply, low power consumption.

TNC Output: 252A25/252A100	TNC Output Isolation: 152A25G/152A100G	152A50/152A100	Integral Cable Output: 152A50Z/152A100Z	Low Excitation voltage 152A20L	DC supply: 153A25
					

Model:YMC			252A25 252A100	152A50G 152A100G	152A50 152A100	152A50Z 152A100Z	153A25
Sensitivity		mV/g	25/100 pC/g	50/100	50/100	50/100	25
Measurment Range		g pk	±1000	±100/50	±100/50	±100/50	±50
Max. shock accelerations		g pk	±5000	±5000	±5000	±5000	±1000
Resolution		mg rms	-	1/0.5	1/0.5	1/0.5	2
Excitation voltage		VDC	-	18 - 28	18 - 28	18 - 28	±5VDC
Constant current		mA	-	1 - 10	1 - 10	1 - 10	
DC offset		VDC	10 -14	10 -14	10 -14	10 -14	
Frequency Range	±10%	Hz	1 ~ 8k	1 ~ 8k	1 ~ 8k	1 ~ 8k	1 ~ 8k
	-3dB	Hz	0.5 ~ 10k	0.5 ~ 10k	0.5 ~ 10k	0.5 ~ 10k	0.5 ~ 10k
Resonant Frequency		kHz	30	30	30	30	30
Temperature Range		℃	-54 - +150	-54 - +121	-54 - +121	-54 - +121	-40 - +85
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output type			TNC	TNC	4 pin socket	Integral Cable	4 c or es cables
Housing Material			Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Hard aluminum oxide
Housing Isolation		Ω	-	≥109	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$
Sealing			Welding	Welding	Welding	Welding	Epoxy resin
Weight		g	31	36	49	45	37
Size		mm	Φ16.5×35	Φ16.5×40	Φ18×39	Φ17.3×46	Φ24×45
Mounting			M5	M5	M5	M5	M5

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1.6. Standard Accelerometers

YMC 271A01 standard Accelerometers:natural quartz as the Sensing Element, good temperature characteristic, long-term stability;Triangle shear structure, the influence of the effective strain isolation base;The bottom and Top double M5 (10-32 optional) Mounting, which can applied As a lab or at or y standard for the precise calibration of vibration transducers by the back-to-back comparison method;Can be used as a vibration Sensor precision calibration, testing and inspection, etc.
YMC 271A02 is applied as High frequency standard sensors.

271A01（mid-frequency）:Charge Output Mode 171A10（mid-frequency）:IEPE output mode	271A02（High frequency）:Charge Output Mode
	

Model:YMC		271A01	171A10	271A02
Sensitivity		1.25 pC/g	10 mV/g	2.0 pC/g
Measurment Range		±1000g	±500g	±5000
MAX. Acceleration Limits		±1000g	±1000g	±10000g
Ammplitude Linearity		±0.5 %	±0.5 %	±0.5 %
Frequency Range	±5%	1 – 5000 Hz	1 – 8000 Hz	2 - 10000 Hz
	±10%	0.6 – 6500 Hz	0.6 – 10000 Hz	1 - 15000 Hz
Resonant Frequency		20 kHz	20 kHz	55 kHz
Transverse Sensitivity:		≤3%（30Hz）	≤3%（30Hz）	≤3%（30Hz）
Magnetic Sensitivity		0. 1g/T	0. 1g/T	0. 1g/T
Acoustic Sensitivity		0.001 g (154 dB)	0.001 g (154 dB)	0.001 g (154 dB)
Base Straun Sensitivity		0.001g/με	0.001g/με	0.001g/με
Temerture Transient Sensitivity		0.05g/℃	0.05g/℃	0.05g/℃
Temperature Range		-70 - +150 ℃	-40 - +121 ℃	-54 - +150 ℃
Temerture Response		±5%	±5%	±5%
Sensing Element		Quartz	Quartz	P-10
Capacitance		47 pF	-	1600 pF
Output Type		M5	M5	M5
Housing Material		Stainless Steel	Stainless Steel	Stainless Steel
Sealing		Welding	Welding	Welding
Weight		37	40	17
Size		Φ18X27	Φ18X279	Φ16X18
Mounting		2-M5	2-M5	M5
Recommended Mounting Torque		0.5 - 3.5 Nm	0.5 - 3.5 Nm	0.5 - 3.5 Nmm

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1.7. High Temperture Accelerometers

YMC Series High temperature accelerometers:High impedance Charge Output Mode.

Applications

- High Temperature Vibration Measurements
- Engine Compartment Studies
- Exhaust Component Vibration Tests
- Steam Turbine Testing
- Engine Vibration Analysis

2107CM	245A20CM:Tri-axial	272A10	272A10T/272A10HT
			

Model:YMC			2107CM	245A20CM	272A10	272A10T	272A10HT
Sensitivity		pC/g	50	20	10	10	10
Measurment Range		g pk	±5000	±1000	±2000	±2000	±2000
Frequency Range	±5%	Hz	0.5 - 5k	2 - 3k	3 – 6k	2 - 6k	2 - 6k
	±10%	Hz	0.3 – 6.5k	1 – 5k	1 – 8k	1 – 8k	1 – 8k
Resonant Frequency		kHz	25	20	24	24	24
Temperature Range		℃	-73 - +220	-70 - +220	-70- +250	-70 - +350	-70 - +482
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Type			Integral Cable 3 m M5	3-M5	M5	Differential 2 pin 7/16-24	Differential 2 pin 7/16-24
Housing Material			Stainless Steel	Titanium	Stainless Steel	Cast Iron Alloy	Cast Iron Alloy
Housing Isolation		Ω	No	No	No	Yes	Yes
Sealing			Welding	Welding	Welding	Welding	Welding
Weight		g	32	45	15	91	91
Size		mm	Φ16X22	25.4×25.4 ×14	Φ10X18.5	42×30×25.4	42×30×25.4
Mounting			M5	Φ5(holes)(Z) 2-M5(X,Y)	M5	3-Φ5(holes)	3-Φ5(holes)

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1.8. Water-proof Accelerometers

YMC273A series（Charge Mode） and YMC173A series （IEPE MODE）water-proof accelerometers and all connecting leads are completely waterproof and designed to withstand water pressure and temperature variations. These accelerometers are equipped with an integral sheathed cable that can be or dered in any length up to 100 meters. Consult the factory for customized versions of these sensors.

273A10/273A50:
Charge Output Mode
173A10/173A100/173A500
IEPEoutput Mode

Model:YMC			273A10	273A50	173A10	173A100	173A500
Sensitivity			10 pC/g	50 pC/g	10 mV /g	100 mV /g	500 mV/g
Measurment Range		g pk	±2000	±1000	±500	±50	±10
Resolution		g rms	-	-	2.5	0.25	0.1
Frequency Range	±5%	Hz	1 – 8k	1 – 8k	0.5 – 6k	0.5 – 3k	0.5 – 3k
	±10%	Hz	0.5 – 10k	0.5 – 10k	0.3 – 8k	0.3 – 5k	0.3 – 5k
Resonant Frequency		kHz	35	25	35	25	15
Temperature Range		℃	-54 - +150	-54 - +150	-40 - +121	--40 - +121	-40 - +121
Sensing Element			Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Output Type			Inntegral Cable	Inntegral Cable	Inntegral Cable	Inntegral Cable	Inntegral Cable
Housing Material			316LStainless Steel	316LStainless Steel	316LStainless Steel	316LStainless Steel	316LStainless Steel
Sealing			Welding	Welding	Welding	Welding	Welding
Weight		g	16	25	18	27	38
Size		mm	Φ12X20	Φ16X23	Φ13X26	Φ16X28	Φ18X33
Mounting			M5	M5	M5	M5	M5

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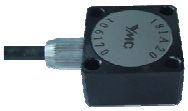
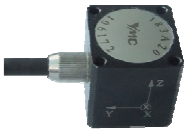
1.9. MEMS Accelerometers (DC Response)

YMC181A series MEMS DC Response Accelerometers are applied for analysis very low frequency or constant acceleration. Unlike piezoelectric accelerometers, these accelerometers respond to 0 Hz .
Measuring Range:±2g to ±200g;181A series:Signal Axis;182A series:Bi-axial;183A series:Triaxial.

YMC 181ASeries	Model	Sensitivity	Measuring Range(pk)	Frequency Range （±5%）	Resolution
	181A02	1000 mV/g	±2 g	0 – 200 Hz	4 mg rms
	181A02P	1000 mV/g	±2 g	0 – 150 Hz	0.15 mg rms
	181A05	300 mV/g	±5 g	0 – 200 Hz	7.5 mg rms
	181A10P	200 mV/g	±10 g	0 – 400 Hz	0. 5 mg rms
	181A20	100 mV/g	±20 g	0 – 300 Hz	10 mg rms
	181A50P	40 mV/g	±50 g	0 – 800 Hz	3.5 mg rms

182A/183ASeries	Model		Sensitivity	Measuring Range（pk）	Frequency Range （±5%）	Resolution
	182A02	183A02	1000 mV/g	±2 g	0 – 200 Hz	4 mg rms
	182A02P	183A02P	1000 mV/g	±2 g	0 – 150 Hz	0.15 mg rms
	182A05	183A05	300 mV/g	±5 g	0 – 200 Hz	7.5 mg rms
	182A10P	183A10P	200 mV/g	±10 g	0 – 400 Hz	0. 5 mg rms
	182A20	183A20	100 mV/g	±20 g	0 – 300 Hz	10 mg rms
	182A50P	183A50P	40 mV/g	±50 g	0 – 800 Hz	3.5 mg rms

Model:YMC	181A Series Signal Axis		182A Series Bi-axial		183A Series Triaxial.	
	General Purpose	Precise (suffix p)	General Purpose	Precise (suffix p)	General Purpose	Precise (suffix p)
Output Type	Single End		Single End		Single End	
Shock Limit	±3000 g pk	±5000 g pk	±3000 g pk	±5000 g pk	±3000 g pk	±5000 g pk
Excitation voltage	9 – 15 VDC		9 – 15 VDC		9 – 15 VDC	
Temperature Range	-40- + 85℃		-40- + 85℃		-40- + 85℃	
Output Type	Integral Cable with 3 m (4 c or es)		Integral Cable with 3 m (5 c or es)		Integral Cable with 3 m (5 c or es)	
Housing Material	Hard aluminum oxide		Hard aluminum oxide		Hard aluminum oxide	
Sealing	Epoxy resin		Epoxy resin		Epoxy resin	
Weight	13 Gram	18 Gram	30 Gram	40 Gram	30 Gram	40 Gram
Size（mm）	21.5X21.5X10.5	25X25X12	20.5X20.5X20.5	28X28X25	20.5X20.5X20.5	28X28X25
Mounting	4-Φ3 or Gule	4-Φ3 or Gule	M5 or 4-Φ2.5	M5 or 2-Φ4	M5 or 4-Φ2.5	M5 or 2-Φ4

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2. Piezoelectric Vibration Velocity Sensors

YMC series Piezoelectric Vibration Velocity Sensors are solid state piezoelectric velocity measurement devices. Many vibration analysts prefer to examine vibration signals in terms of velocity (mm per second) to amplify the signal of interest. Piezoelectric Velocity Sensors inherently decrease high frequency signals allowing better measurement of low frequency vibration. They are essentially accelerometers with an internal integration circuit which will produce an output relative to velocity.

Features

- Ideal for monitoring low-to-intermediate frequency applications
- Generates an output proportional to velocity
- Velocity measurements serve as a reliable guide for monitoring the severity of faults in slow-rotating equipment
- Corrosion resistant and hermetically sealed
- ESD and miswiring protection

YMC 311V01 Series:IEPE Mode,Top output YMC 312V01 Series:DC supply Mode, Top output	YMC 311V02 Series:IEPE Mode,Side output YMC 312V02 Series:DC supply Mode,Side output
	

2.1.1. Piezoelectric Vibration Velocity Sensor s（IEPE Mode）

Model:YMC		311V01-25.4	311V01-50.8	311V01-100	311V01-250	311V01-500	311V01-1270
		311V02-25.4	311V02-50.8	311V02-100	311V02-250	311V02-500	311V02-1270
Sensitivity	mV/mm/s	200	100	50	20	10	4.0
Measurment Range	mm/s pk	±25.4	±50.8	±100	±250	±500	±1270
Resolution	mm/s rms	0.03	0.05	0.1	0.25	0.5	1
Frequency Range ±5%	Hz	5 - 1k	5 - 1k	5 - 1k	5 - 1k	5 - 1k	5 - 1k
Frequency Range ±10%	Hz	3 - 3k	3 - 3k	3 - 3k	3 - 3k	3 - 3k	3 - 3k
Resonant Frequency	kHz	15	15	15	15	15	15
Temperature Range	℃	-40 - +85	-40 - +85	-40 - +85	-40 - +85	-40 - +85	-40 - +85
Sensing Element		Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear	Ceramic /Shear
Excitation voltage	V	+18-+28	+18-+28	+18-+28	+18-+28	+18-+28	+18-+28
Constant current	mA	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10	2 - 10
DC offset	V	+10 - +14	+10 - +14	+10 - +14	+10 - +14	+10 - +14	+10 - +14
Output Connect or		MI-C-5015	MI-C-5015	MI-C-5015	MI-C-5015	MI-C-5015	MI-C-5015
Housing Material		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Housing Isolation	Ω	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$	$\geq 10^9$
Sealing		Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue	Epoxy Glue
Weight	g	65	65	65	65	65	65
		80	80	80	80	80	80
Size	mm	Φ25.4×55	Φ25.4×55	Φ25.4×55	Φ25.4×55	Φ25.4×55	Φ25.4×55
		30L×18W ×21H	30L×18W ×21H	30L×18W ×21H	30L×18W ×21H	30L×18W ×21H	30L×18W ×21H
Mounting		M5	M5	M5	M5	M5	M5
		M6	M6	M6	M6	M6	M6

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2.1.2. Piezoelectric Vibration Velocity Sensors（ DC Supply Mode）

2.1.2.1. Dynatic with 4 - 20mA output

Model	Sensitivity	Measuring Range(mm/s)	Frequency Range （±10%）	Resolution	Weight(g)	Size(mm)
312V01-12.7-ACI	630μA/mm/s	±12.7	5– 1000 Hz	0.1 mm/s rms	125	Φ28×65
312V01-25.4-ACI	315μA/mm/s	±25.4	5 – 1000 Hz	0.3 mm/s rms	125	Φ28×65
312V01-50.8-ACI	167μA/mm/s	±50.8	5 – 1000 Hz	0.8 mm/s rms	125	Φ28×65
312V01-100-ACI	80μA/mm/s	±100	5 – 1000 Hz	1.0 mm/s rms	125	Φ28×65

2.1.2.2. True Rms with 4 - 20mA output

Model	output	Measuring Range(mm/s)	Frequency Range （±10%）	Resolution	Weight(g)	Size(mm)
312V01-12.7-DCI	4 – 20 mA	0 -12.7	5 – 1000 Hz	0.07 **mm/s** rms	125	Φ28×65
312V01-25.4-DCI	4 – 20 mA	0 - 25.4	5 – 1000 Hz	0.1 **mm/s** rms	125	Φ28×65
312V01-50.8-DCI	4 – 20 mA	0 - 50.8	5 – 1000 Hz	0.15 **mm/s** rms	125	Φ28×65

2.1.2.3. True Rms with 0-5V output

Moodel	output	Measuring Range(mm/s)	Frequency Range （±10%）	Resolution	Weight	Size
312V01-12.7-DCV	0 – 5 V	0 - 12.7	5 – 1000 Hz	0.1 mm/s rms	125	Φ28×65
312V01-25.4-DCV	0 – 5 V	0 - 25.4	5 – 1000 Hz	0.22 mm/s rms	125	Φ28×65
312V01-50.8-DCV	0 – 5 V	0 - 50.8	5 – 1000 Hz	0.50 mm/s rms	125	Φ28×65

Common Specialities:

1、 Power Supply:+15- +30VDC
2、 Nonlinearity:＜1% F.S
3、 TransverseSensitivity:＜5%
4、 Temperture Range:-40 - +85℃
5、 Output signal:4 - 20mA,0 -5V, or others
6、 Load Resistance:((VDC-15）×1000/20mA)Ω
7、 Signal Ground Insulation Resistance:≥10^8Ω
8、 Output types:
- ➢ 4 – 20mAOutput:2 pin MIL-C-5015;
- ➢ Terminal or lead output type:directly lead to the output signal;
- ➢ Output with or iginal acceleration signal:3 pin MIL-C-5015

3. Proximity (Eddy) Displacement Sensors

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YMC401D series Non-contact displacement Sensor s using eddy current technology measure distances, displacements, or positions of any electrically-conductive target.
These objects may have both ferromagnetic and non-ferromagnetic properties. Due to the high insensitivity to oil, dirt, dust, moisture, interference fields, etc. the eddy current principle is eminently suitable for applications in harsh industrial environments.
YMC401D series power supply:20mA/-24VDC，Frequency Range:DC to 5kHz;

Model:YMC		401D01	401D02	401D04	401D08	401D10
Sensitivity	V/mm	8 ±2%	8 ±2%	4 ±2%	2 ±2%	0.8 ±5%
Measurment Range	mm	0.25 - 1.25	0.40 - 2.40	1.0 - 5.0	1.25 - 8.25	1.25 - 11.25
Probe diameter	mm	Φ5	Φ8	Φ11	Φ18	Φ25
Frequency Range	Hz	DC - 5k	DC - 5k	DC - 5k	DC - 5k	DC - 5k
Probe Temperature Range	℃	-30~+150	-30~+150	-30~+150	-30~+150	-30~+150
Pre-amplifier Temperature Range	℃	-20 - +65	-20 - +65	-20 - +65	-20 - +65	-20 - +65
Probe output type		M6	M6	M6	M6	M6
Pre-amplifier output type		Terminals	Terminals	Terminals	Terminals	Terminals
Power Supply		20mA/-24VDC	20mA/-24VDC	20mA/-24VDC	20mA/-24VDC	20mA/-24VDC
Probe Size	mm	M8x1 x 65	M10×1x 50	M14×1.5x 110	M20×1.5×110	M30×2×110
Pre-amplifier Size	mm	60 x 80 x 45	60 x 80 x 45	60 x 80 x 45	60 x 80 x 45	60 x 80 x 45

4. Quartz Dynamic Force Sensors & Impedance Head

YMC series Quartz Dynamic Force sensors are used to measure dynamic or quasistatic tensile or compression forces. It has a high rigidity and thus a high natural frequency. The high resolution allows to measure low dynamical changes of large forces.

4.1. Dynamic Force Sensors (compression only):Side output

YMC 501F Series dynamic force sensors (compression only).Applications for :packaging drop test, impact test, cyclic impact, collision test, punching machine, punching, etc.

501F01-1（IEPE output）

501F01,501F02,501F03,501F03PE

Model:YMC	Sensitivity	Resonant Frequency	Measurement Range	Resolution	Temperature Range	Weight	Output Type	Size mm
501F01-1	10 mV/N	≥50 kHz	500 N	2 mN	-40 - +121℃	9 Gram	M3	Φ15X7.5
501F01	10 mV/N	≥50 kHz	500 N	2 mN	-40 - +121℃	20 Gram	M5	Φ18X10
501F02	2.5 mV/N	≥50 kHz	2 kN	10 mN	-40 - +121℃	20 Gram	M5	
501F03	1 mV/N	≥50 kHz	5 kN	20 mN	-40 - +121℃	20Gram	M5	
501F03PE	4 pC/N	≥50 kHz	5 kN	-	-70 - +200℃	17 Gram	M5	

4.2. General purpose Dynamic Force Sensors (tensile/ compression)

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YMC502F Series dynamic force sensors,Apply for he dynamic tensile and compression, impact and repeated applications, drop testing, material testing, etc;Pay attention to when the choice, pressure Measuring Range is different;

Model:YMC		502F01	502F02	502F03	502F03PE
Sensitivity	mV/N	10	2.5	1	4 pC/N
Measurment Range	N pk	±500	±2000	+5kN,-2kN	5kN,-2kN
Nonlinearity	%	≤1	≤1	≤1	≤1
Resonant Frequency	kHz	60	60	60	60
Temperature Range	℃	-40 - +121	-40 - +121	-40 - +121	-70 - +200
Resolution	mNrms	6	25	50	-
Low Frequency	Hz	1	1	1	0.3
Output type		M5	M5	M5	M5
Size	mm	Φ18X19	Φ18X19	Φ18X19	Φ18X19
Weight	g	30	30	30	27

4.3. Dynamic Force sensors (compression only):Top output mode

YMC512F Series dynamic force sensors, Apply for special occasions, need from Top output products, single direction of pressure.Such as pulse force hammer, etc.;Used in the packaging drop test, impact test, cyclic impact, collision testing, punching machine, punching, modal test, etc..

Model:YMC		512F01	512F02	512F03	512F04	512F05	512F06
		512F01PE	512F02PE	512F03PE	512F04PE	512F05PE	512F06PE
Sensitivity	mV/N	5	2.5	1	0.5	0.1	0.1
	pC/N	4	4	4	4	4	2
Measurment Range	kN pk	1.0	2.0	5.0	10	50	100
Nonlinearity	%	≤1	≤1	≤1	≤1	≤1	≤1
Resonant Frequency	kHz	70	70	70	65	65	50
Temperature Range	℃	-40 - +150	-40 - +150	-40 - +150	-40 - +150	-40 - +150	-40 - +150
Resolution	mNrms	20	50	100	250	1000	2000
Low Frequency	Hz	1	1	1	0.5	0.5	0.3
Output type		M5	M5	M5	M5	M5	M5
Size	mm	Φ14×30	Φ14×30	Φ14×30	Φ26×34	Φ26×34	Φ48×56
Weight	g	20	20	20	58	58	310

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4.4. Dynamic Force Sensors (compression only): Link

 YMC511F Series:link, compression only	 YMC511FSeries:clamp for compression Tension and

Model:YMC		511F01	511F02	511F03	511F04	511F05	511F06	511F07	511F08PE
Sensitivity	mV/N	10	2.5	1	0.5	0.1	0.05	0.02	2 pC/N
Measurment Range	kN pk	0.5	2	5	10	50	100	250	500
Nonlinearity	%	≤1	≤1	≤1	≤1	≤1	≤1	≤1	≤1
Resonant Frequency	kHz	70	70	70	50	50	40	35	25
Temperature Range	℃	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-40 - +121	-70 - +200
Resolution	mNrms	10	50	120	250	1250	2500	5000	-
Low Frequency	Hz	1	1	1	1	1	1	1	0.3
Output type		M5	M5	M5	M5	M5	M5	M5/TNC	M5/TNC
Size	mm	Φ18XΦ6 X10.5	Φ18XΦ6 X10.5	Φ18XΦ6 X10.5	Φ26XΦ8 X12.5	Φ26XΦ8 X12.5	Φ46XΦ20X13	Φ60.5XΦ 26.5X17	Φ95XΦ40.5X23
Weight	g	24	24	24	30	30	85	250	780

4.5. 3-component Dynamic Force Sensors

YMC 503F Series 3-component Dynamic Force sensors

YMC 503F series 3-component can simultaneously monit or ing dynamic force three orthogonal directions (X, Y, Z).The sensor provides two with four screw hole assembly splint, respectively fixed on both sides of the sensor .Apply for force limited vibration test, dynamometer, modal analysis, the cutting force test, etc.Charge and IEPE output optional.

Model:YMC		503F01	503F02
Sensitivity	mV/N	Fx/ Fy:2 Fz:1	Fx/ Fy:0.3 Fz:0.15
Measurment Range	kN pk	Fx:Fy:2.5 Fz:5	Fx:Fy:15 Fz :30
Nonlinearity	%	≤1	≤1
Resonant Frequency	kHz	10	10
Temperature Range	℃	-54 - +121	-54 - +121
Resolution	N rms	X:Y:0.015;Z:0.03	X:Y:0.15;Z:0.3
Low Frequency	Hz	X:Y:1; Z:1	X:Y:0.5; Z:0.5
Output type		3-M5	3-M5
Size	mm	55X 55X60	80X 80X90
Weight	g	1000	3000

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4.6. Impedance Head (Force +Acceleration)

YMC504Fseries Mechanical Impedance Sensor s simultaneously measure an applied, driving-point force and response acceleration of a test structure for determining parameters such as mechanical mobility and mechanical impedance. The unit consists of a precision accelerometer and a quartz force Sensor in a common housing. Installation is primarily facilitated at the structural excitation points, in series with a stinger and vibration shaker.

Model:YMC		Sensitivity	Frequency Range (±10%)	Measuring Range	Resolution	Temperature Range	Output Type	Mounting Type	Weight	Size
504F01	A	50mV/g	0.5Hz -5kHz	±100g	1mg	-40~+121	M5	2-M5	30Gram	Φ20×27 mm
	F	5mV/N	≥55kHz	±1000N	5mN		M5			
504F02	A	100mV/g	0.5Hz-5kHz	±50g	0.5 mg	-40~+121	M5	2-M5	30Gram	Φ20×27 mm
	F	10mV/N	≥55kHz	±500N	2.5mN		M5			
504F01PE	A	50pC/g	0.5Hz-5kHz	±500g	-	-54~+150	M5	2-M5	28Gram	Φ20×27 mm
	F	4pC/N	≥50kHz	±1000N	-		M5			

5. Piezoelectric Dynatic Pressure Sensors

YMC601P series piezoelectric pressure Sensor s with IEPE amplified output are used for a variety of dynamic pressure measurements. The Sensors are well suited for continuous operation in “dirty” environments, underwater, and in field test applications across long cables. For higher temperature applications, charge output Sensors are available for use up to +250 °C.

Features:

- Fast, micro-second response time;
- Resonant frequency to ≥100 kHz;
- Measure small pressure changes at high static pressure levels;
- Operating temperature range from -40 to +250 °C(Charge Mode);
- Rugged solid state construction withstands shock and vibration to thousands of G's;
- IEPE amplified output for “dirty” or underwater environments can be transmitted through long, or dinary coaxial cable without loss of signal strength or an increase in noise

YMC 601P Series:Charge Output Mode(PE)
YMC 611P Series:Voltage Output Mode（IEPE）:

Model:YMC		601P01	601P30	601P60	611P01	611P30	611P60
Sensitivity		10000 pC/MPa	100 pC/MPa	100 pC/MPa	5.0 V/MPa	167 mV/MPa	83.5 mV/MPa
Measurment Range	MPa pk	0 – 1MPa	0 – 30MPa	0 – 60MPpa	0 – 1MPa	0 – 30MPa	0 – 60MPa
Nonlinearity	%F.S	≤1	≤1	≤1	≤1	≤1	≤1
Resonant Frequency	kHz	80	150	150	80	150	150
Temperature Range	℃	-54 - +150	-54 - +150	-54 - +150	-40 - +121	-40 - +121	-40 - +121
Resolution	kPa	-	-	-	0.015	0.015	0.015
Low Frequency	Hz	1	1	1	1	1	1
Output Type		M5	M5	M5	M5	M5	M5
Size	mm	Φ14 × 33	Φ14 × 29	Φ14 × 29	Φ14 × 33	Φ14 × 29	Φ14 × 29
Mounting		M10×1	M10×1	M10×1	M10×1	M10×1	M10×1
Weight	g	14	13	13	16	15	15

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6. Signal Conditioners

6.1. Charge Amplifiers

Charge amplifiers convert the charge output by a piezoelectric Sensor into a prop or tional voltage, which is used as an input variable for analysis systems, and can be digitized in an analog-to-digital (A/D) converter if necessary. A charge amplifier basically consists of an inverting voltage amplifier with a high open-loop gain and capacitive negative feedback. It relies on a metal oxide semiconduct or field effect transist or (MOSFET) or a junction field effect transist or (JFET) at its input to achieve high insulation resistance and minimize leakage current. If the open-loop gain is sufficiently high, the cable and Sensor capacitance can be neglected, leaving the output voltage dependent on just the charge at the charge amplifier input and the range capacit or .

	YMC8101 Miniature Charge Amplifier for industrial Use Rugged, sealed case; with various connection facilities; also available with range adjusted to a specific Sensor . Its rugged construction makes it particularly suitable for installation on site in machine monit or ing systems.
	YMC8102:multiple input type:Charge, Voltage, IEPE; Optional Gain, High-pass filters, Low-pass Filters, Sensitivity unifor mization; Built-in double integrators circuit for acceleration, displacement and velocity; Switchable for Gain, LPF, HPF, Sensitivity n or malized. Charge and Voltage input. Int. Battery and Ext. Source Supply.
	YMC 8102A:Desktop low noise Charge amplifier (general test) YMC 8102T:panel mounted low noise Charge amplifier Gain, High pass and low pass, n or malized, such as external regulation, voltage (V) and Charge (PE) 2 kinds of input mode, can be positive and negative power supply converter;
	YMC8103 Multi-channel Charge Amplifier Features:Assembled Multi-channels (4chs,6 chs and 8 chs available);Small size, high integration ;Three decimal-system unifor mization output(1-10 pC/UNIT);Switchable for Gain and LPF ;Low noise and wide frequency band(0.3 to 100kHz);Low price, suitable for multi-point test;Overload indication

Model		YMC8101	YMC8102	YMC8102 A/T	YMC8103
Input Range		±5╳10^4pC	Voltage/IEPE:±10V Charge:±10^6pC	Voltage:±10V ; Charge:±10^6pC	±10^5pC
Sensitivity Unifor mization		1 - 9.99 （Adjustable）	0.100~999	1.00~1099	1.00~10.99
Gain	mV/pC	1 - 100（Fixed）	0.01,0.1,1, 10,100,1000	0.01,0.1,1, 10,100,1000	1,3,10,30,100 300,1000
High-pass Filters	Hz	1（Fixed）	A:0.3,1,310,30,100 V:1 ,3,10,30,100 D:1 ,3,10,30,100	0.3,1,3,10,30,100	0.3 (Fixed)
Low-pass Filters	kHz	≤100（Fixed）	0.3,1,3,10,30,100	0.3,1,3,10,30,100	0.3,1,3,10,30,100
Accuracy	%	±1	A:±1; V:±3 ;D:±3	±1	±1
Noise	μV	≤10	≤5	≤5	≤5
Output Range	V	±5	±10	±10	±10
Power Supply		DC:±14V - ±18V	220V50Hz0.1A or 110V60Hz0.2A	220V50Hz0.1A or DC±18V-±27V	220V50Hz0.3A or DC±18V
Operating Temperature	℃	-10 - +50	-10 - +50	-10 - +50	-10 - +50
Weight	kg	0. 2	1.3	1.5	5.0(6 chs)
Size	mm	80×50×24	45×122×200	70×132×200	236×132.5×300 (6 chs)

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6.2. Sensor Signal Conditioners

	YMC 8201 Battery-powered IEPE sensor signal conditioner; Small size, light weight; Wide frequency range; LEDs operation status indicator; Low-battery warning; Internal or external power supply; Suitable for filed test. Battery-powered IEPE sensor signal conditioner; Small size, light weight; Wide frequency range; LEDs operation status indicator; Low-battery warning; Internal or external power supply; Suitable for filed test.
	YMC8201T:Single channel, Miniature IEPE sensor signal conditioner. External DC power supply, small size, light Weight.Can provide **excitation source** or IEPE sensors, power supply and the IEPE sensors recuperated the output signal amplifying, filtering and so on.
	YMC8204:4 channels IEPE sensor signal conditioner; Selectable current (4 or 10 mA); Selectable gain 1 to 100; Two types of output connector; Wide frequency range; For monitoring normal or faulty circuit condition by status LEDs; . Wide Frequency Response, Low Noise, Good Stability;Gain,Excitation Current Switchable; Apply for IEPE Transducer's general test.
	YMC3832: MEMS sensor signal conditioner, can power for triaxial capacitive sensor ; Built-in Selectable Low-pass filters,Gain.Can input 3 chs MEMS sensor's input.
	YMC8208/8216:8/16 channels IEPE sensor signal conditioner; Selectable current (4 or 10 mA); Selectable gain 1 or 10; Two types of output connector; Wide frequency range; For monitoring normal or faulty circuit condition by status LEDs; Dimensions:44mm x 430mm x 240mm (19 inches case).
	YMC 3834:multi-functional, multi-input mode condinioner. Support differential (bridge), Voltage, IEPE etc. 4 chs combination, provide bridge voltage, amplification, High and low pass filtering and other functions. Can directly connect to the strain sensor, MEMS sensor, IEPE sensors and voltage output mode sensors.

ModelYMC	Channels	Input Type	Gain	Frequency Range	Excitation Voltage	Excitation Current	Input/output Type	Size mm	Weight	Power Supply
8201	1	IEPE	1,10	0.3Hz - 100kHz	24VDC	2mA	BNC/BNC	26×66×100	300g	Built-inRechargeable batteries
8201T	1	IEPE	1（Adjustble）	0.3Hz - 100kHz	24VDC	2mA	BNC/BNC	44×17×50	55g	External DC supply
8204	4	Voltage IEPE	1,10,100	0.3Hz - 100kHz	24VDC	OFF,4mA, 10mA,20mA	BNC/BNC	45×122×200	1.4kg	220V50Hz0.2A
8208	8	IEPE	1,10	0.3Hz - 100kHz	24VDC	4mA	BNC/BNC	482×44×240	3.8kg	220V50Hz0.2A 110V60Hz1A
8216	16	IEPE	1,10	0.3Hz - 100kHz	24VDC	4mA	BNC/BNC	482×44×240	3.8kg	220V50Hz0.3A 110V60Hz1A
3832	3	Voltage	1,2,4, 8,10	DC - 30kHz	9VDC	20mA	7 pin/BNC	45×122×200	1.0kg	220V50Hz0.2A
3834	4	IEPE /Voltage/ differential (bridge)	Adjustble	DC - 100kHz	Adjustble	4mA	7 pinBNC/BNC	273×89×317	2.5Kg	220V50Hz0.3A

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6.3. Miniature Impedance Convertors(2-wire Miniature Charge Amplifiers)

YMC8301 series In-line IEPE powered charge converters can convert charge output sensor signals to low-impedance voltage signals. Power Supply:2-20mA/+18 to+28VDC, Fixed gains of 0.1,1.0,10 mV/pC. YMC8301 series are designed to have an inverting characteristic, so its output signal polarity is negative (-) ;

YMC8301	YMC8301A	YMC8301B	YMC8301C	YMC8301TE
				
M5/M5:3.1Gram Φ6.5×30mm	M5/M5 5GramΦ9×12mm	M5/TNC,17Gram; Φ11.4×54mm	PCB mounting: 2.6 Gram TO-5 ;Φ9×15mm	BNC/BNC，with TEDS 50Gram;Φ12.5×81mm

Model:YMC	Gain	Input Range	Output Range	Frequency Range	Accuracy	Noise	Power Supply	Operating Temperature
8301- 0.1	-0.1mV/pC	± 50000 pC	±5.0V	0.3Hz - 40kHz	± 2%	≤ 40μV	2-20mA +18 - +28VDC	- 40 - +121℃
8301-1.0	-1.0 mV/pC	± 5000 pC	±5.0V					
8301-10	-10 mV/pC	± 500 pC	±5.0V					

6.4. Dynamic strain amplifiers

YMC86 Series Dynamic strain amplifier:direct digital display each channel outputVoltage;Optional shift Gain more, bridge, Low pass Filters;Long wire automatic compensation;Double 12 bit D/A automatic tuning balance;Suitable for general and High frequency response and strain test.
YMC 8602 can keep value with force sensor; Can directly display the force and maximum values of the test.

YMC 8601	YMC 8602	YMC 8603
		

Model		YMC 8601	YMC 8602	YMC 8603
Inout Channels		1	1	2、4、6、8、10
Bridge Resistance		120 - 1000Ω	120 - 1000Ω	120 - 1000Ω
Input Range		0 - ±100000με	DC :0 - ±100mV;AC:0 - ±10000mV	0 - ±100000με
Output Range		±10Vp/5mA	±10Vp/5mA	±10Vp/5mA
Noise		≤5μV	≤3μV	≤3μV
Stability		Zero:±1μV/℃;±0.1%/F.S/2h Sensitivity:±0.01%F.S/℃;±0.1%/F.S/2h	-	Zero:±1μV/℃;±0.1%/F.S/2h Sensitivity:±0.01%F.S/℃;±0.1%/F.S/2h
Bridge Voltage		1、2、5、10VDC/50mA(Max.)	12VDC/50mA	1、2、5、10VDC/50mA(Max.)
Gain	Steps	100;300;1000;3000	DC:100,1000;AC:1,10	100;300;1000;3000
	Accuracy	≤±0.5%	≤±0.5%	≤±0.5%
	Nonlinearity	0.1% FS	0.1% FS	0.1% FS
Balance (Resistance:Within 1%)		Auto:±5000με	Auto Clear Zero	Auto:±5000με
Frequency Range		DC-100kHz	DC-100kHz	DC-100kHz
Low-pass Filters(-3dB)		30,100,300,1k,3k,10k,30k,100kHz	100kHz	30,100,300,1k,3k,10k,30k,100kHz
Operating Environment		Operating Temperature:-10 to 50℃; Humidity: 85% R.H.	Operating Temperature:-10 to 50℃; Humidity: 85% R.H.	Operating Temperature:-10 to 50℃; Humidity: 85% R.H.
Power Supply		220V±10%50Hz0.2A	220V±10%50Hz0.2A	220V±10%50Hz1A
Size mm		45W ×122H ×200D	155W ×70H ×200D	235W ×132.5H ×300D
Weight		1.2 Kg	2.0 Kg	4.5Kg(10 chs)
Input/Output Type		Input:7 pin LEMOSoocket;Output:BNC	Input:4 pinLEMO Scoket	Input:7 pin LEMOSoocket;Output:BNC

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7. Dynamic Data Acquisition System

7.1. Dynamic Data Collectors

YMC series dynamic data collector, it is a kind of multichannel parallel data acquisition system based on USB2.0 interface; With voltage/IEPE two input mode; Multi-channel arbitrary combination, support for multiple devices cascade, built-in programmable gain amplifier and real-time digital filtering; Supporting function rich in universal test and analysis software; Provide the LabView and MATLAB data interface, convenient and subsequent data processing; Particularly applicable to the company production of force and acceleration sensor matching vibration measurement data acquisition/analysis system, the modal test system, etc.

YMC 9004 YMC 9004H	YMC 9204H	YMC 9208	YMC 9216	YMC 9232
				

ModelYMC		9004	9004H	9204H	9208	9216	9232
Channels	Input (AD)	4	4	4	8	16	32
	output（DA）	0	0	2	2	2	2
Signal Input Range	Voltage	±10Vp	±8.8Vp	±10Vp	±10Vp	±10Vp	±10Vp
	IEPE	±10Vp	±8.8Vp	±10Vp	±10Vp	±10Vp	±10Vp
	ChargePE	-	-	$\pm 10^5$pC	-	-	-
Input Signal Frequency Range	Voltage	DC - 30kHz	DC - 200kHz	DC - 100kHz	DC - 50kHz	DC - 50kHz	DC - 50kHz
	IEPE	0.3Hz - 30kHz	0.3Hz - 200kHz	0.3Hz - 100kHz	0.3Hz - 50kHz	0.3Hz - 50kHz	0.3Hz - 50kHz
	ChargePE	-	-	0.3Hz~100kHz	-	-	-
Signal Input(AD)	Signal Channel Sampling Rate	100kHz	3MHz	1MHz	100kHz	100kHz	50kHz
	Simultaneous Sampling Rate	100kHz	750kHz	1MHz	100kHz	100kHz	50kHz
	AD bits	24	16	16	24	24	24
	Bulit-in Gain	×1 ,×10 ,×100	×1 ,×10	×0.1, ×1, ×10 ,×100	×1 ,×10,×100	×1 ,×10,×100	×1 ,×10,×100
	Accuracy	≤±0.5%	≤±0.5%	≤±0.5%	≤±0.5%	≤±0.5%	≤±0.5%
Signal Output （ DA）	Conversion Rate	-	-	500kHz	500kHz	500kHz	500kHz
	Analog Output Range	-	-	±10Vp	±10Vp	±10Vp	±10Vp
	Accuracy	-	-	≤±1%	≤±1%	≤±1%	≤±1%
Size（mm）W ×H×D		100×122×45	200×122×45	240 ×70×280	240 ×70×280	240 ×70×280	340×132.5 ×280
Weight		460g	750g	3.5kg	3.5kg	4.0kg	6.5kg
Power Supply		USB Self –powering	7.5VDC	220V50Hz	220V50Hz	220V50Hz	220V50Hz

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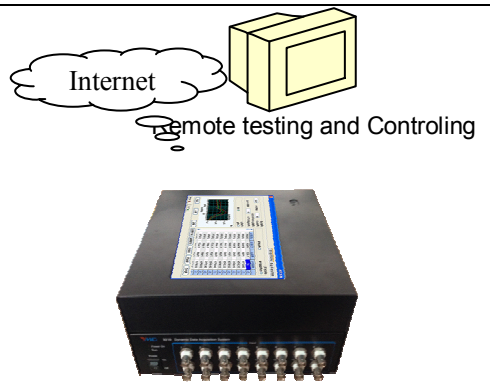
7.2. Portable multi-channel data acquisition system

YMC 9096 Dynamic and static strain testing system

Features:

- 4 channel combination plug-in, can work alone as a 4 channel strain collector, USB interface;
- Support up to 96 channels, insert any combination;
- Support strain differential input/IEPE input;
- Sampling frequency:20 k - 100 kHz parallel sampling;
- Support IEPE sensors (IEPE Mode)
- Support strain input, Fixed bridge (10v), differential input;
- Built-in Gain(adjustable), overload indication;
- Provide test and analysis software; suitable for multipoint strain and vibration test;

YMC 9216S Portable 16 channel dynamic data acquisition and analysis system



Features:

- Input channels:16;
- Input type:IEPE/V, ±10 V.
- Sampling rate:100 kHz/CH;
- Input :24 AD;
- Output :2 chs,24 ;
- Windows 7 operating system, touch screen, can be directly testing and analysis;
- Interface, USB, LAN, through USB, LAN, WIFI, remote network control control;
- Provide the corresponding test and analysis software, remote testing and analysis software;
- Size:240 ×140 ×280 mm
- Weight:about 5 kg
- Suitable for field test and analysis;Remote testing and monitoring.

7.3. Signal test and modal analysis software

YMC9800 consists of Dynamic signal testing & analysis module, basic modal test & analysis module, impulse response analysis module, digital signal generator module, sensor test & calibration module, strain test and analysis module, basic condition monitoring & analysis module, acoustic test & analysis module, Vibration table/impact table testing, modal software etc.

YMC9800-01 Dynamic Signal Testing & Analysis Module

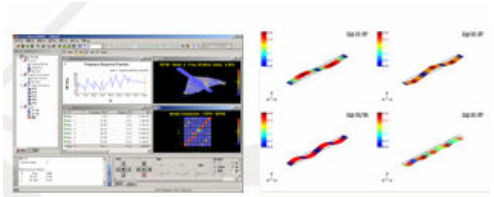
Supporting all YMC dynamic data collectors. Data can be exported as UFF, ASCII, MatLab etc format. Various analysis functions such as;:data preprocessing, time domain, amplitude domain analysis, frequency domain analysis and time-frequency domain analysis etc.

YMC9800-02 Basic Modal Test & Analysis Module:

Consists of three main funcional modules:project management, dynamic singal processing, and modal prarmeters identification

The imported source data can be both time domain signals (excitation and respose time histories) and frequency domain signal (frequency response function, FRF)

With the capacity of not only traidtional experimental modal analysis (EMA, both input and output data are needed), but also operational modal analysis (OMA, exticited by the enviroment loads, only the output data can be measured).



YMC9800-03 Impulse Response Analysis Module

Support YMC9204 (KC - 2000, KCL2000) Series shock tester, can complete the impact test of High acceleration, the completion of real-time signal acquisition, filtering, real-time control, and generate the shock response spectrum.Automatic generation of test report;

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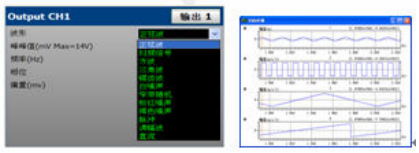
YMC9800-04 Digital Signal Generator Module

Support YMC9200 digital signal generator and all YMC DAQ with DA output dynamic data collector;The dual digital signal output, can produce sine, sine sweep, square wave, triangle wave, sawtooth wave, white Noise and narrow-band random, pink Noise, brown Noise, pulse, amplitude modulation wave and dc waveform;Adjusting amplitude, frequency, phase, etc.



YMC9800-05 Sensor Test & Calibration module

Support the VCS-01 vibration sensor test & calibration system;Auto-calibrating Sensitivity, Linearity, amplitude-frequency characteristic and phase frequency characteristics;calibration method:point by point comparison method, the sine sweep method, the random excitation method and the shock excitation method;Offer Test Report;

YMC9800-06 Strain Test & Analysis Module

Support dynamic and static strain testing system, data acquisition, signal analysis and processing.

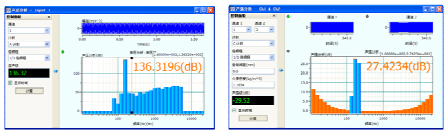
➢ **YMC9800-07**Basic Condition Monitoring & Analysis Module

Support YMC on-line healthy monitoring system ; It offers multi-staged acousto-optic alarm trigger output and multi-channel combination. The real-time data acquisition, data record, trend analysis, on-line monitoring, fault diagnosis, the management of reporting and instrument of large-sized mechanical equipment could be made for long time. Simple operation, easy installation, strong ability of anti-disturbing and high reliability.

The Diagram of Measuring Distribution & Three-level Alarms; Parameters Setting & Device Management; Real-time Display & Record; Real-time Histogram Display; The Inquiry of Historic Records; The data list and trend analysis; The Precise Fault Diagnosis.

YMC9800-08 Acoustic Test & Analysis Module

Acoustic analysis module provides Acoustic signal real-time processing and post-processing functions, can analyses sound intensity, sound pressure, and can use the L, A, C weighting, 1/1 and 1/3 octave analysis.



YMC 9800-09 Vibration table test software modules

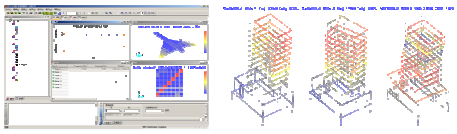
With vibration sensor, dynamic data collector, according to the national standard of electric, hydraulic, mechanical vibration table for each index calibration;Such as distortion, transverse vibration than, the related projects, such as amplitude uniformity test results automatically saved, easy to make relevant reports;Historical data managed by tree structure, use very convenient.

YMC 9800-10 Shock test module

Shock test software module, provides the perfect analysis and processing functions, including test setup, operation control, digital filtering, data storage and display, test report is automatically generated, and so on.Shock waveform support national standard and national standard, MIL standard and the standard of customer custom.Support YMC shock tester sensor .

N-MODAL Modal test and analysis software

N-modal is designed for experimental modal analysis (EMA, both excitation and response data are required), operational modal analysis (OMA, only response data is required), and operational deflection shape (ODS) analysis N-Modal ODS.Consists of three main funcional modules:project management, dynamic singal processing, and modal prarmeters identification;The imported source data can be both time domain signals (excitation and respose time histories) and frequency domain signal (frequency response function, FRF) ;Multi-interface to most popular multi-channel data acquisition systems and analyzers;With the capacity of not only traidtional experimental modal analysis (EMA, both input and output data are needed), but also operational modal analysis (OMA, exticited by the enviroment loads, only the output data can be mesured);Developed in the Microsoft's Visual C++ language development enviroment, making use of the technology of Object Oriented Program, easily to maintain and extend;With flexible interface arrangement, abundant mouse and shortcut keys operation, greatly improve work efficiency;Perfectly display and control of two-dimentional curves and three-imentional graphics (geometry and mode shape animation);Function of data copy, screen copy, saving curves to JPG files, saving animations to AVI files, and so on, provide users with the privilledge of rapidly report and presentation creation.



For more information, please contact with us.

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8. Exciters & Calibrators System

8.1. Signal Generators

SG-01 Swept Signal Generator

- Output waveform:sine, triangle wave, square wave; white noise;
- Frequency Range2Hz to 2kHz ;20Hz to 20kHz; Power Output:60W(4Ω);
- Signal Output:±10VP-P
- Swept-frequency mode:Manual, Automatic;
- Operating Mode:Log, Linear;
- Frequency Range:2 Hz to 2 kHz; 20Hz to 20 kHz

Apply for driving MS-50 modal shaker and VT-50 small vibrator.

YMC9200 Digital Signal Generator

- Output Wave:Defined Waveform (Set by Software)
- Output Channels:2
- Frequency Range:DC to 30kHz
- Output Amplitude:±10VP-P
- DA Conversion Rate:500kHz
- Interface:USB2.0
- Weig:300Gram;
- Size:100×122×45mm
- Power Supply:USB Interface self-powering

8.2. Linear Power Amplifiers

LA series Power Amplifier are designed to drive MS series Modal Shakers and MS series small vibrators. Features:

- Adjustable RMS output-current limit
- Low or high output impedance
- Low distortion over wide frequency range
- Extensive built-in protection
- Operating mode (current or voltage), current state and interlock input disabled
- Rear panel voltage and current monitor points
- Multifunction display (True Colour LCD) showing approximate output current and output voltage, clipped output signal, temperature overload, current overload.
- LA60 and LA-100 power amplifier is built-in Sine signal generator from 5Hz to 30kHz with 60/100VA power output.

Model		LA-60	LA-100	LA-200	LA-500	LA-800	LA-1500
Rated Power Output		60 VA	100 VA	200 VA	500 VA	800 VA	1500 VA
Input Impendence		>10 kΩ	>10 kΩ	>10 kΩ	>10 kΩ	>10 kΩ	>10 kΩ
Rated Voltage Output		15 Vrms	17 Vrms	17 Vrms	25 Vrms	32 Vrms	40 Vrms
Rated Current Output		4 Arms	6 Arms	12 Arms	20Arms	25 Arms	37.5Arms
Non-linearity Distortion		＜0.5%	＜0.5%	＜1%	＜1%	＜1%	＜0.5%
S/N Rate		≥90	≥90	≥80dB	≥80dB	≥80dB	≥90dB
Gain		10 V/V±2dB	10 V/V±2dB	10 V/V±2dB	10 V/V±2dB	10 V/V±2dB	10 V/V±2dB
Output Current Monitoring Output		-	-	8 A/V±2dB	8A/V±2dB	8 A/V±2dB	-
Frequency Range Hz	DC	0 - 20k±1dB	0 - 50k±1dB	0 - 50k±1dB	0 - 50k±1dB	0 - 10k±1dB	0 - 10k±1dB
	AC	20 - 20k±1dB	20 - 50k±1dB	20 - 50k±1dB	20 - 50k±1dB	——	——
Frequency Range Hz	Full Capacity	20 - 10k	20 - 5k	20 - 5k	20 - 5k	20 - 5k	10 - 5k
	Reduced Capacity	0 - 20k	0 - 50k	0 - 50k	0 - 50k	0 - 50k	0 - 10k
Size W×H ×D mm		245 ×85×320	483×89×340	483×133×340	483×133×480	483×133×540	500×485×560
Weight Kg		5	10.5	13	22.5	28	63
Power Supply		220V50Hz 2A	220V50Hz 3A	220V50Hz 3A	220V50Hz8A	220V50Hz 10A	20V 50Hz 15A
To drive Modal Shakers and vibrators		MS-50 VT-50	MS-50 VT-50	MS-100 VT-150	MS-500 VT-300	MS-800 VT-500	MS-1000 VT-1000

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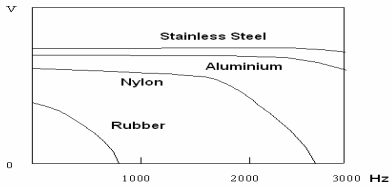
8.3. Impact Hammers

IH series Impact Hammers integrate a rugged, force sensor into the hammer's striking surface. Variety of hammers can suit different size test subject. Assortment of tips offer frequency tailored impulse. Apply for structure health testing, resonance determination, modal analysis; Charge (PE) Type can be customized;

IH-01-1	IH-01	IH-02 IH-02PE	IH-05 IH-05PE	IH-10 IH-10PE	IH-20 IH-20PE	IH-50 IH-50PE
						

Model:YMC		IH-01-1	IH-01	IH-02 IH-02PE	IH-05 IH-05PE	IH-10 IH-10PE	IH-20 IH-20PE	IH-50 IH-50PE
Sensitivity	mV/N	100	25	2.5	1	0.5	0.25	0.1m
	pC/N	-	-	4	4	4	4	4
Measurment Range	N pk	50	200	2000	5000	10000	20000	50000
Nonlinearity	%	≤1		≤1%	≤1%	≤1%	≤1%	≤1%
Resolution	mNrms	2	6	50	100	250	450	1000
Resonant Frequency	kHz	70	60	55	55	45	45	45
Low Frequency	Hz	1	1	1	1	0.5	0.5	0.3
Head Weight	g	15	28	80	120	445	445	1000
Head Diameter	mm	Φ14	Φ18	Φ16	Φ20	Φ32	Φ32	Φ51
Hammer Length	mm	250	250	250	250	340	340	400
Output Type		M5	M5	BNC	BNC	BNC	BNC	BNC

Impact pulse width and Frequency response is different with different hammer head and tips. It should be based on actual tests.

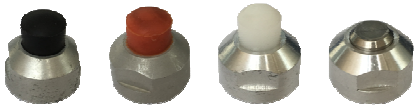


Common Parameters

IEPE Mode:
- Excitation voltage:+18 - +28V;
- Constant current:2 - 10mA;
- DC offset:10 - 14VDC;
- Output impendanc:⩽100Ω;

Charge Output Mode:
- Insulation Resistance:⩾10^{12}Ω

Tips(IH-01,IH-02)



Soft Medium Hard Aluminum

Tips(IH-05)

Rubber Nylon Aluminum Steel

Tips(IH-10,20,50)

Soft Medium Hard Mass

8.4. Modal Shakers

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MS series Modal Shakers are designed for demanding modal testing applications; MS series permanent magnet modal shakers provide precise, reliable, stable and long-lasting operation. Highest quality materials, stringent quality control and rugged construction assure a versatile means of modal excitation for any experimental modal test using the attached excitation method.
Based upon years of practical modal test experiences, the line of YMC Modal shakers, all exhibiting high force-to-weight ratio, has been specifically developed to help ensure the best possible modal test performance with minimum setup time.
Uses:

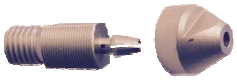
- General mechanical mobility measurements
- Experimental modal analysis on most mechanical structures
- SISO, MISO, SIMO and MIMO modal test applications
- Advanced structural dynamics investigations
- Structural damage detection
- Finite element model correlation

MS-10
MS-20

MS-50
MS-100
MS-200
MS-500
MS-1000

Model	MS-10	MS-20	MS-50	MS-100	MS-200	MS-500	MS-1000
Rated Force (Peak)（N）	≥10	≥20	≥50	≥100	≥200	≥500	≥1000
Max. Displacement (PK-PK)（mm）	± 5	± 5	± 7.5	± 10	± 10	± 12.5	± 15
Max. Input Current (Arms)	≤2.0	≤2.0	≤6	≤12	≤20	≤25	≤38
Frequency Range (Hz)	DC - 6k	DC - 6k	DC - 5k	DC - 4k	DC - 4k	DC - 3k	DC - 1.5k
Coil DC Impedance	6.0Ω	6.0Ω	1.0Ω	1.0Ω	0.5Ω	0.6Ω	0.6Ω
Effective Moving Mass (Kg)	0.1	0.1	0.30	0.5	0.67	0.95	2.0
Size(mm)	Φ78×115	Φ78×115	Φ148×200	Φ158×200	Φ158×200	Φ210×250	Φ240×300
Mounting Hole Size(mm)	80×80 4-Φ7	80×80 4-Φ7	158×128 4-Φ8	200×160 4-Φ10	200×160 4-Φ10	240×190 4-Φ10	240×200 4-Φ11
Weight（Kg）	3.3	3.3	14	18	18	29	40
Output Type	Rod /M5	Rod /M5	Rod/M5	Rod /M5	Rod /M5	Rod /M5	Rod /M5
Associated Amplifier	60W	60W/100W	60W/100W	200W/500W	500W/800W	500W/800W	1500W

Optional accessories:

Rod Size:M5/M5,Length:100mm	Hex Wrench	Air Cooling Device （Optional）	Holding Device （Optional）
			

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8.5. Small Vibrators

VT series Permanent Magnetic VibrationVibrators are the high-quality, compact machine with a permanent magnetic field. Be designed for long, trouble-free operation, and has a force rating of from 10N to 1000N enabling relatively heavy loads to be excited to high g levels. The moving element is supported by a robust rectilinear guidance system consisting of grouped radial and transverse flexures in a unique construction. The flexures are made from a bonded sandwich of spring steel and a damping elastomer, providing a clean acceleration waveform with low cross motion and low distortion characteristics.

USES

- Vibration testing
- Mechanical impedance measurements
- Educational demonstrations
- Structural response testing
- Vibration transducer calibration

VT-20	VT-50	VT-150	VT-300	VT-500	VT-1000
					

Model	VT-20	VT-50	VT-150	VT-300	VT-500	VT-1000
Rated Force (Peak) N	≥20	≥50	≥150	≥300	≥500	≥1000
Max. Displacement（mm）	± 4	± 4	± 7.5	± 7.5	± 10.0	± 10.0
Max. Acceleration（g）	20	20	40	45	45	45
Maximum Input Current (Arms)	≤2.5	≤6	≤12	≤12	≤25	≤30
Frequency Range (Hz)	20 - 10k	10 - 9k	10 - 5k	10 - 5k	5 - 2k	5 - 2k
Coil DC Impedance	2Ω	0.9Ω	0.8Ω	0.7Ω	0.9Ω	0.7Ω
Effective Moving Mass (Kg)	0.1	0.25	0.45	0.54	1.0	2.2
Size(mm)	Φ96×132（H）	Φ138×165(H)	Φ180×175(H)	Φ180×200(H)	Φ210×250(H)	Φ240×300(H)
Mounting Hole Size(mm)	105×80 4-Φ9	150×120 4-Φ10	200×160 4-Φ10	200×160 4-Φ10	240×190 4-Φ11	240×200 4-Φ10
Weight（Kg）	3.5	8.5	15	20	32	40
Output/ Type	Table Φ26/ M5	Table Φ30/ M5	Table Φ40/ M5	Table Φ50/ M5	Table Φ56/ M5	Table Φ92/ M8
Associated Power Amplifier	100W	100W/200W	200W/500W	500W/500W	800W	1500W

8.6. Vibration Exciter

SVT Series Permanent Magnetic Vibration Exciter is a high-quality, compact machine with a permanent magnetic field. It is designed for Vibration testing, Mechanical impedance measurements, Educational demonstrations, Structural response testing, and Vibration transducer calibration.

SVT-01	SVT-02	SVT-03
		

Model	SVT-01	SVT-02	SVT-03
Rated Force（N pk）	≥10	≥45 (60 with air cooling)	≥100(200 with air cooling)
Max. Displacement（ pk-pk mm）	4	8	12.7
Max. Velocity:（m/s pk）	1.4	1.65	1.4
Max. Bare Table Acceleration（g pk）	30 (No load)	50 (No load)	55 (No load)
Maximum Input Current::(Arms)	1.8	5 (7 with air cooling)	15 (25 with air cooling)
Frequency Range (Hz)	30 - 22k	10 - 20k	5 - 10k
Effective Moving Mass (Gram)	35	100	190
Table Size(mm)	Φ76×75（H）	Φ148 ×140(H)	Φ190×160(H)
Weight（Kg）	1.1	8.5	15
Output Type	TableΦ14/ M5	TableΦ29/ M5	TableΦ40/ M5
Static Flexure Stiffness:N/mm	2	12	5.6
Associated Power Amplifier	60W/100W	100W/200W	200W/500W

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8.7. Portable Vibration Calibrators

VC-01 Hand-held Vibration Calibrator:

Rapid judgment measurement system integrity ;Rapid measurement the sensitivity of acceleration/Velocity/Displacement sensors; Battery powered with automatic shutdown; Self-contained 1grms vibration reference; Small size, light weight.

Features:

- Acceleration Amplitude(RMS):9.81m/s^2（1g）±3%
- Velocity Amplitude (RMS):9.81mm/s±3%
- Displacement Amplitude (RMS):9.81μm±3%
- Vibration Frequency:159.2Hz±0.5%
- Output waveform:Sine waveform
- Waveform distortion:≤3%
- Maximum Load:100Gram
- Size:Φ52×155
- Weight:600 gram (with batteries)

VC-02 Portable Vibration Calibrator

VC-02 is designed to test and calibrate almost all types of vibration transducers and monitoring systems - in the lab or in the field.VC-02 is a complete, self contained, portable vibration calibrator. Frequency, vibration amplitude can be continuous adjustble, direct LCD display.

- Vibration Frequency Range:10-10kHz;
- Vibration Amplitude:0-±5grms;
- Input Mode:Charge /IEPE/Voltage /4-20mA/Eddy input;
- Size:300(L)×140(W)×85（H）
- Vibration Frequency:10Hz to 10kHz;
- Dimensions:300×140×85mm;
- Weight:6.5kg;
- Load Range:≤100Gram(1g);
- Power： 220V50Hz/110V60Hz;
- By test and control software,can finish automatic calibration of vibration sensor Sensitivity, amplitude /frequency Respone, Non – linearity.

VC-03 Static displacement calibration device

VC-03 is a simple displacement testing and calibration device, using micrometer as displacement reference , digital display, provide a variety of the clamping fixture, easy clamping sensor; Suitable for static calibrating and testing YCM401D series displacement sensor.

Measuring Range:0-25mm; Accuracy:±1μm;Size:300 L×140W×85 H; Weight:2.5kg.

8.8. IEPE Sensor Simulator

YMC8401 IEPE Sensor Simulator installs in place of an IEPE sensor and accepts test signals from a voltage function generator. The unit serves to verify signal conditioning settings, cable integrity, and tune long lines for optimum system performance. This unit requires power from an IEPE sensor signal conditioner.

- Input Voltage Range:±5V;
- Input Inpedance:1×108Ω to 1×109Ω;
- Accuracy:1.00 (+0,+2%);
- Output Bias:11V±3VDC;
- Weight:120Gram;
- Noise:<40μV;
- Amplitude Linearity:<2%
- Power Supply:2 to 20mA/+18 to +28VDC;
- Size:60×26×26mm;

8.9. Calibration Precision Capacitances and Charge attenuator

YMC8501 series precise capacitances are composed of three kinds of capacitance value precision capacitance:100 pF±0.1%;1000 pF±0.1%; 10nF±0.1%

Using polystyrene capacitor, high precision, low dissipation factor, stable performance. Stainless steel casing and shield cap.Be used to Charge Amplifier calibration and testing;

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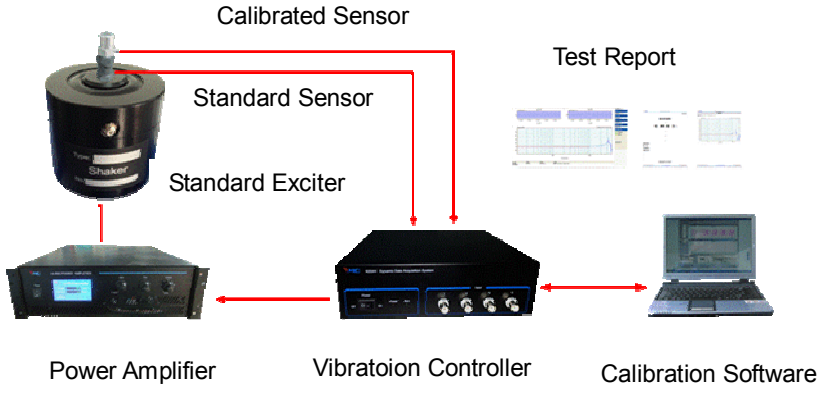
YMC8502 Charge attenuator offers charge attenuation rate:100:1, 200:1, 300:1 (optional);Accuracy:±2%;Temperature Range:-40 to +80 ℃ ;Input and output method:BNC;Apply for piezoelectric sensors, such as dynamic force sensing Chargeoutput beyond the maximum Charge amplifier Measurment Range.

8.10. Vibration/Shock Measurement & Calibration System

8.10.1. VSC-01 Vibration Sensors Calibration System

VCS-01 Consists of:

1、 Standard sensor
2、 Standard vibration table
3、 Linear power amplifier
4、 Multi-function vibration analyzer(2-output,4-input)
5、 Test and calibration software



Features:

1. Back-to-back Secondary Reference;
2. Frequency Range:5 Hz to 30kHz;
3. Vibration Amplitude:0 to 500m/s^2（Power Amplifier, Exciter selectable）
4. Auto-calibrating Sensitivity, Linearity, amplitude-frequency characteristic and phase frequency characteristics;
5. calibration method:point by point comparison method, the sine sweep method, the random excitation method;
6. Offer Test Report;

Main parts:

1. Standard sensor:using natural quartz as Sensing Element, High stability, can be used as a sensor calibration;
2. Standard vibration table:please refer to SVT and VT Series vibration table index; The load and Max vibration level
3. Linear power amplifier:according to the vibration table to select the corresponding power amplifier.Linear power amplifier with High signal-to-noise ratio, wide frequency range and small distortion;
4. Multi-function vibration analyzer (2 output, 4 input) :High conversion rate of 500 kHz signal output and 1 MHz 4 channel parallel sampling rate, ensure complete and accurate signal;
5. Test and calibration software:according to the conditions set automatically complete all testing, and report form, and can according to the measured sensor Sensitivity, automatically adjust the internal Gain, to ensure that the signal-to-noise ratio and testing Accuracy.

Selection guidelines:

1. Standard sensor

YMC271A01:Frequency Range1 – 6500Hz; YMC271A02:Frequency Range5 – 15kHz;

2. Standard vibration table

Model	Max. Bare Table Acceleration（g pk）	Frequency Range（Hz）	Load capacity（g）	ARecommended Power Amplifier	Recommended Standard sensor
SVT-01	30 g	30 - 22k	300	LA-100	YMC271A02
SVT-02	50 g	10 - 20k	1000	LA-200	YMC271A01、YMC271A02
SVT-03	55 g	5 - 10k	1500	LA-500	YMC271A01 、YMC271A02

Note: VT Series vibration tables can provide more force output.

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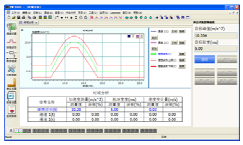
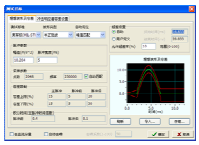
8.10.2. Shock Testing System

SVC-01 shock testing system consists of YMC9204H vibration/shock measuring instrument, and YMC9800-05 software; YMC9204H is Built-in 4 chs Charge amplifiers, IEPE signal conditioners, can input 4 chs Charge, Voltage or IEPE sensors signal at the same times;Via USB2.0 interface connected with the computer. Bulit-in 2 chs DA signal output, can generate half sine, trapezoidal wave, after peak sawtooth wave and pulse signal etc. Multi I/O can control and detect shock table.Real-time display working state, the measured acceleration value, pulse width, and velocity variation, measurement error, etc.;Automatic finish test report.Support the national standard, MIL standard and custom standard.Appply for all kinds of shock test, drop test, impact test and vibration/shock test.

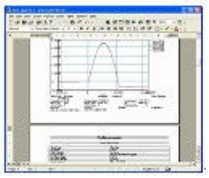
YMC9204H Shock Analyzer



Shock Testing



Shock Setting



Testing Report

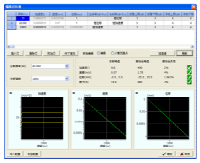
Main Parameters:

- Input signal types:Charge(PE), Voltage, IEPE;
- The built-in Gain:Charge 0.1, 1,10,100 mV/pC; Voltage/IEPE:1,10,100 mV/mV;
- The built-in filter:built-in analog filter + digital anti-aliasing filter;
- AD sampling rate:real-time sampling rate per channel 1 MHZ;
- DA conversion rate:500 kHz;
- Sampling method:linternal trigger;External triggering; continuous recording etc;
- Measurement Range:1 to 100000 g(PK);
- Measuring pulse width:0.201 mS to 3000 mS;
- 4-input, 2-output;
- Customized software for needs;

Apply for vibration/ shock testing and calibration.;

8.10.3. Vibration Control System

VSC-02 Vibration control system consists of YMC9800-03 vibration control software and YMC9204H controller. VSC-02 can automatic finish to control according to preseted vibration level such as vibration acceleration, velocity and force amplitude etc.

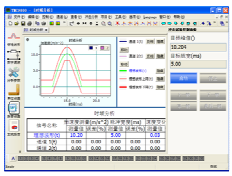


8.10.4. Vibration Calibration System

VSC-03 Vibration calibration system consists of YMC9800-03 vibrator test software module, YMC9204H controller and vibration sensors. Can finish to test and calibrate for almost vibrators according to relevant national verification regulation.Offers the distortion degree, the transverse vibration, amplitude uniformity and other related parmeters. Automatically save the result of the test, easy to make relevant report.

8.10.5. Shock calibration system

SVS-02 Shock calibration system consists of YMC9800-10 shock test software modules, YMC9204H controller and shock accelerometer.Can finish to test and calibrate almost shock tables according to the relevant national standard, MIL standard and user-defined standards. Automatically save the result of the test, easy to make relevant report.



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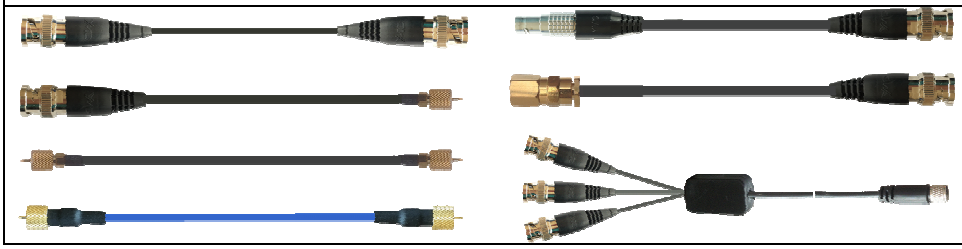
9. Cables & Accessories

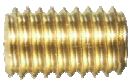
9.1. Cables

Code	Features
C001	Coaxial Shielded cable SYV-50-2-1（50Ω）;Φ3;－40 to +70℃; General purpose
C002	Low Noise cable:STYV-1(Φ2mm);-40-+65℃;<120pF/m;Insulation >10^{11}Ω;
C003	Low Noise cable:STYV-2(Φ3mm),-40-+65℃;<92pF/m;Insulation >10^{11}Ω; Charge(PE)
C004	High Temperature, low noise cable STFF-0.9(Φ2mm); -65-+200℃;<110pf/m，Insulation >10^{12}Ω; Charge(PE)
C005	Single core, double shielding, low noise cables;Φ3.2;－65 to +200℃; Charge(PE)
C006	Double core, double shielding, low noise cables;;Φ3.5;－65 to +200℃; Charge(PE)
C007	Double core; High Temperature shield cable,Φ5;－65 to +200℃; Industrial sensors(Red)
C008	4 core shielded cable;Φ3;－40 to +150℃;Industrial sensors(Blue)
C009	4 core shielded cable;Φ1.8;－40 to +70℃;Miniature triaxial IEPE sensors
C010	Waterproof shielded cable;Φ3.8;－40 to +150℃; Waterproof sensors
C011	6 core double shielded cable; Φ3.8;Strain Amplifiers and general purpose
C012	Waterproof low noise shielded cable;Φ3.8;－40 to +150℃; Waterproof sensors,Charge output
C013	2 core pin shield spiral cable;Φ 3.8;Straightening length 1.5 m;- 40 - + 120 ℃; handheld instrument
C014	3 core pin shield spiral cable;Φ 3.8;Straightening length 1.5 m;- 40 - + 120 ℃; handheld instrument
C015	4 core pin shield spiral cable;Φ 3.8;Straightening length 1.5 m;- 40 - + 120 ℃; handheld instrument
C016	5 core pin shield spiral cable;Φ 3.8;Straightening length 1.5 m;- 40 - + 120 ℃; handheld instrument
C017	Coaxial Shielded cable SYV-50-1（50Ω）;Φ2;－40 to +70℃; General purpose
C018	Coaxial high temperature Shielded cable SYV-50-1（50Ω）;Φ2;－40 to +220℃; General purpose(Blue)

Typical Cables



9.2. Connector Adaptors

Code		Pictures	Code		Pictures
D001	M5/M5(Female)		D005	3-BNC（2-Female/1-Male）	
	M5/10-32(Female)				
	10-32/10-32(Female)				
D002	M5/M5(Female)		D007	TNC （ Female ） /BNC（Female）	
	10-32/10-32(Female)				
D003	BNC(Male)/M5(Female)		D004	BNC(Female)/BNC(Female)	
	BNC(Male)/10-32(Female)				

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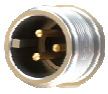
9.3. Cable Connectors

Code	Features	Pictures
F001	M5Plug（Male）	 
F101	M5Scoket（Female）	
F002	10-32Plug（Male）	
F102	10-32Scoket（Female）	
F003	5-44Plug（Female）	 
F103	5-44Scoket（Male）	
F004	SMAPlug（Male）	 
F104	SMAScoket（Female）	
F005	BNCPlug（Male）	 
F105	BNCScoket（Female）	
F006	TNCPlug（Male）	 
F106	TNCScoket（Female）	
F007	1/4-28 4 pin Plug（Female）	 
F107	1/4-28 4pin Scoket（Male）	
F008	MIL-C-5015 2 pin Plug（Female）	 
F108	MIL-C-5015 2 pin Scoket（Male）	
F009	LEMO Plug（Male）	 
F109	LEMO Scoket（Female）	
F010	MIL-C-5015 2 pinPlug（Bend）（Female）	  
F011	MIL-C-5015 3 pin Plug（Female）	
F111	MIL-C-5015 3pin Scoket（Male）	

9.4. Mounting Studs & Adaptor Studs

Mounting Studs: A001 – A×L

Code	thread specification:A	Length:L(mm)	Material	Picture
A001	M3、5-44、M5、10-32、M6、1/4-28、M8、M10、M12 etc.	Selectable	Stainless Steel	

Mounting Studs: A002 – A/B×LA/LB

Code	A	B	LA(mm)	LB(mm)	Material	Picture
A002	M3、5-44、M5、10-32、M6、1/4-28、M8、M10、M12 etc.	M3、5-44、M5、10-32、M6、1/4-28、M8、M10、M12 etc.	Selectable	Selectable	Stainless Steel	

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9.5. Adaptor Studs

A003 – A/B or A004 – A/B

Code	Size mm	Mounting Screw A/B	Insulation	Material
A003	Φ20mm×3（Customized）	M5/M5,M5/10-32,M5/M6,M5/M8 etc. Selectable	-	Stainless Steel
A004			≥10^8Ω	Anodized Aluminium

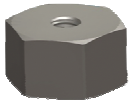
A003: Stainless Steel:

A004: Anodized Aluminium

9.6. Mounting Pad & Triaxial Mounting Bases

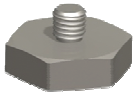
Mounting Pad

Code	Size mm	Mounting Screw A/B	Insulation	Material
E001	Φ20×10-M5 （ Selectable, Internal thread）	Adhesive	-	Stainless Steel
EG001	Φ20×10-M5 （ Selectable, Internal thread）	Adhesive	≥10^8Ω	Anodized Aluminium
E002	Φ20×5-M5 (Selectable）	Adhesive	-	Stainless Steel
EG002	Φ20×5-M5 (Selectable）	Adhesive	≥10^8Ω	Anodized Aluminium



E001: Stainless Steel:

EG001:v



E002: Stainless Steel

EG002: Anodized Aluminium

Triaxial Mounting Bases:

Code	Size mm	Mounting Screw A/B	Insulation	Material
EG003	20×20×20,30×30×30 Selectable	M5,10-32 etc Selectable, Internal thread	≥10^8Ω	Anodized Aluminium
EG004			≥10^8Ω	Polyformaldehyde
E005			-	Stainless Steel

E003: Anodized Aluminium

E004: Polyformaldehyde

E005: Stainless Steel

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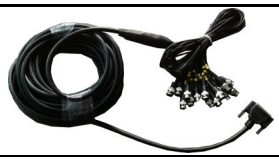
9.7. Magnetic Mounting Bases

Code	Force	Size (mm)	Insulation	Range	Picture
B001-50N（Plane）	50N	Φ18.5×10-M5	≥10^8Ω	< 20Gram sensor	 Plane Mounting
B001-100N（Plane）	100N	Φ25×12-M5	≥10^8Ω	< 50Gram sensor	
B001-150N（Plane）	150N	Φ30×12-M6	≥10^8Ω	< 100Gram sensor	
B001-200N（Plane）	200N	Φ30×12-M6	≥10^8Ω	< 150Gram sensor	
B002-150N（Curved）	150N	Φ26×26-M5	≥10^8Ω	< 100Gram sensor	 Curved Surface
B002-180N（Curved）	180N	Φ30×25-M5	≥10^8Ω	< 150Gram sensor	
B002-220N（Curved）	220N	Φ38×25-M10×1.5	≥10^8Ω	< 200Gram sensor	
B002-300N（Curved）	300N	Φ40×25-M10×1.5	≥10^8Ω	< 250Gram sensor	

9.8. Patch Panels and Multi-conductor cables

	
4 channels input(BNC Plug) ,4 chs output(BNC Scoket) Customized	DB25 input 16 channels BNC output; DB25/DB25 etc. Customized

9.9. Connector Kit

	JX - 001	5-40,M3 Plug Connector Kit
	JX - 002	10-32,M5 Plug Connector Kit
	JX - 003	1/4-28 4 pin Plug Connector Kit

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About Us

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YMC PIEZOTRONICS INC focuses on Sense technology research, product development and large-scale production. YMC has set up the technical exchanges and cooperation platform with many international professional companies and research departments for studying global advanced sensor test and manufacture technology. YMC has an international team of design development and application with many years of experience in the vibration testing field. YMC tries to improve the practicability and reliability of the sensing test and control system, dynamic signal analysis systems, vibration test and control systems, equipment and environmental monitoring systems and so on.

As the professional company, YMC should offer almost products and services for your vibration testing needs!

Our products:

- Vibration acceleration, velocity, displacement, dynamic force, pressure sensor
- Signal conditioning unit, charge, voltage, IEPE, strain control device
- Vibration excitation system:modal vibration force, vibration platform, pulse hammer, vibration calibration instrument
- Dynamic data acquisition system, vibration signal analysis system, modal test and analysis systems, strain test, impact test system

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