VISONG TEST's 200 Series – High Impedance Charge Output Piezoelectric Accelerometer has a charge output, which is directly proportional to input acceleration.

VS100 Series Accelerometers High Light:

- High performance of dynamic characteristics
  - Different choices of the sensitivity from 0.05 pC/ ms^{-2} to 30 pC/ ms^{-2}
  - Consistent frequency response and mounting resonance frequency
- All shear design sensing element
  - Parallel or Triangle Shear Design with Memory Alloy Fasten Feature
  - Choices of High Precision Imported Piezoelectric Ceramic（J series products） or Normal Domestic Piezoelectric Ceramic for different applications
  - Economic design with annular shear sensing element
- Superior temperature response and consistency of the sensitivity
  - Operating temperature from-50°C to +250°C
  - Consistent temperature error with small deviation (<10%)
  - Transducer sensitivity annual decay less than <1%
- Package
  - The standard accessory of the accelerometer includes one low noise cable (1m) and a calibration certificate.

1. 200 Series Accelerometers - General Standard Model



- Parallel and Triangle shear design sensing element, choices of High Precision Imported Piezoelectric Ceramic（J series products） or Normal Domestic Piezoelectric Ceramic for different applications
- Sensitivities from 0.3 pC/ ms^{-2} to 30 pC/ ms^{-2}
- Continue operating temperature at 250ºC
- Consistent high frequency response up to 12 kHz
- Compact design, small package size 7mm hex x 11mm height, and 2 gram weight
- Electric isolation mounting bases are available

Specifications:

Model		Unit	221/222	231/232	241/242	251/252	261/262	271/272
Sensitivity		pC/ms^{-2}	0.3	1	3	5	10	30
Frequency Range	±5%	Hz	0.5~12000	0.5~10000	0.5~7000	0.5~5000	0.5~4000	0.5~3000
	±10%	Hz	0.3~15000	0.3~11000	0.3~9000	0.3~6000	0.3~5000	0.3~3500
Mounting Resonance		KHz	50	42	27	20	15	12
Measurement Range		m/s^2	35000	30000	25000	18000	10000	8000
Capacitance		pF	600	850	850	850	2400	3000
Operating Temperature	First class ceramic	℃	-50~250					
	normal ceramic	℃	-50~160					
Temperature Coefficient		%/℃	0.06					
Weight		gram	2	15	25	36	36	67
Dimension	Top output HexxHxC	mm	7x11x16	13x19x26	16x21x28	18x24x31	18x24x31	21x36x43
	Side output HexxHxL	mm	7x11x12	13x18x20	16x21x23	18x24x25	18x24x25	21x28x28
Mounting		mm	M5					

✧ **Sensor output connector with metric M5 thread, 221, 231, 241, 251, 261, and 271 with top M5 output. 222, 232, 242, 252, 262, 272 with side M5 output.**

2. 200 Series Accelerometers - Shock Accelerometers

General Shock Sensor

- Choices of sensitivity: 0.05 pC / $ms^{-2}$and 0.1 pC / ms^{-2}
- Measurement range up to 30,000 g, nonlinearity less than 1.5%
- No zero shift in high g impact measurement
- Output connector choice of M5 connector or integral cable
- M6 x 0.75 mounting thread

Specifications:

Model		Unit	21100	21101	21102
Sensitivity		pC/ms^{-2}	0.1	0.1	0.05
Frequency Range	±5%	Hz	1~12000		
	±10%	Hz	1~13500		
Nonlinearity		%	≤ 1.5		
Measurement Range		m/s^2	20000	20000	30000
Transverse Sensitivity		%	<5		
Mounting Resonance		KHz	>65		
Operating Temperature		℃	-50~250		
Output Connector			M5	Integral Cable Output	
Weight		gram	7	7	7
Dimension HexxHxC		mm	10.2x14x19	10.2x14x24	10.2x14x24
Mounting		mm	M6		

Case Isolated Shock Sensor

- Sensing element with all imported components
- High frequency measurement up to 12 kHz
- High reliable and consistent isolated case design
- Measurement range up to 30,000 g, nonlinearity less than 1.5%
- No zero shift in high g impact measurement

Specifications:

Model		Unit	21103	21104	21105
Sensitivity		pC/ms^{-2}	0.1	0.1	0.05
Frequency Range	±5%	Hz	1~12000		
	±10%	Hz	1~13500		
Nonlinearity		%	≤ 1.5		
Measurement Range		m/s^2	20000	20000	30000
Transverse Sensitivity		%	<5		
Mounting Resonance		KHz	>60		
Operating Temperature		℃	-50~250		
Base Insulation Resistance		Ω	$>1x10^8$		
Output Connector			M5	Integral Cable Output	
Weight		gram	13		
Dimension HexxHxC		mm	12x14x19	12x14x24	12x14x24
Mounting		mm	M6		

3. 200 Series Accelerometer - Multiple Axis Model

Parallel and Triangle shear design sensing element, choices of High Precision Imported Piezoelectric Ceramic（J series products） or Normal Domestic Piezoelectric Ceramic for different applications

Bi - Axis Measurement Model

- Sensitivities: 1 pC/ ms^{-2} and 3 pC/ ms^{-2}
- Frequency range (±5%) from 0.5Hz up to 5 kHz
- Low profile design, height of 13 mm
- Center through hole with 360° mounting angle

Specifications:

Model		Unit	23504	24504
Sensitivity		pC/ms^{-2}	1	3
Frequency Range	±5%	Hz	0.5~5000	0.5~4000
	±10%	Hz	0.3~6500	0.3~5000
Mounting Resonance		KHz	22	18
Measurement Range		m/s^2	30000	25000
Capacitance		pF	850	850
Operating Temperature	First class ceramic	℃	-50~250	
	normal ceramic	℃	-50~160	
Temperature Coefficient		%/℃	0.06	
Weight		gram	26	30
Dimension		mm	20.5x13x6.5	25.5x16.2x8.3
Mounting		mm	M4	

Tri - Axis Measurement Model

- Sensitivities of 1 pC/ ms^{-2} , 5 pC/ ms^{-2} and 10 pC/ ms^{-2}
- Frequency range (±5%) from 0.5Hz up to 5 kHz
- Low profile design, height of 13 mm
- Center through hole with 360° mounting angle

Specifications:

Model		Unit	23500	25500	26500
Sensitivity		pC/ms^{-2}	1	5	10
Frequency Range	±5%	Hz	0.5~5000	0.5~4000	0.5~1000
	±10%	Hz	0.3~6500	0.3~5000	0.3~1500
Mounting Resonance		KHz	22	18	6
Measurement Range		m/s^2	30000	25000	10000
Capacitance		pF	850	850	2400
Operating Temperature	First class ceramic	℃	-50~250		
	normal ceramic	℃	-50~160		
Temperature Coefficient		%/℃	0.06		
Weight		gram	65	180	200
Dimension		mm	28x14x13	39x19x18	39x19x18
Mounting		mm	M5		

4. 200 Series Accelerometers - Special Application and Industrial Environment Measurement Models

Vertical / Horizontal Two-way Mounting Model

- Design for shaker table, vertical and horizontal mounting methods
- Parallel shear sensing element
- Choices of High Precision Imported Piezoelectric Ceramic（J series products） or Normal Domestic Piezoelectric Ceramic for different applications

Specifications:

Model		Unit	23101
Sensitivity		pC/ms^{-2}	1
Frequency Rang	±5%	Hz	0.5~7000
	±10%	Hz	0.3~9000
Mounting Resonance		KHz	30
Operating Temperature	First class ceramic	℃	-50~250
	Normal ceramic	℃	-50~160
Weight		gram	18
Dimension		mm	13x15x22

TNC Output Connector Model with Isolated Mounting Base

- Three low noise cable as standard output cable
- Offer side output connector as customer special choices of sensitivity 1 pC / ms^{-2}, 3 pC / ms^{-2} and 5 pC / ms^{-2}
- Φ3mm low noise cable as standard output cable
- Offer side output connector as customer special

Specifications:

Model		Unit	23105	24105	25105
Sensitivity		pC/ms^{-2}	1	3	5
Frequency Range	±5%	Hz	0.5~7000	0.5~6000	0.5~3500
Mounting Resonance		KHz	28	22	15
Transverse Sensitivity		%	<3		
Operating Temperature		℃	- 50~160		
Base Insulation Resistance		Ω	$>10^8$		
Output Connector		mm	TNC		
Weight		gram	44	46	50
Dimension	HexxHxL	mm	24x29x42		

Railway Car Monitoring Accelerometer

- Isolated mounting base with consistent mounting resonant frequency
- Parallel shear sensing

Specifications:

Model		Unit	24101
Sensitivity		pC/ms^{-2}	3
Frequency Range	±5%	Hz	0.5~6000
Mounting Resonance		KHz	24.5
Operating Temperature	First class ceramic	℃	-50~160
	Normal ceramic	℃	-50~250
Base Insulation Resistance		Ω	$>10^8$
Weight		gram	32
Dimension	HexxHxL	mm	24x21x19

Dual Case Design with Double Shield Integral Cable

- Stainless steel double case design with double shield cable
- Parallel shear sensing element
- M5 Side through hole mounting

Specifications:

Model		Unit	24206
Sensitivity		pC/ms^{-2}	2
Frequency Range	±5%	Hz	0.5~6000
Mounting Resonance		KHz	20
Operating Temperature		℃	-50~160
Base Insulation Resistance		Ω	$>10^8$
Output Connector and Cable			Double shield Φ 4 mm integral Cable
Weight		gram	80
Dimension	AxBxCxH	mm	28x19x9x33

Standard sensor

- High Precision Imported Piezoelectric Ceramic shear sensing element
- Transverse sensitivity <3%

Specifications:

Model		Unit	23204
Sensitivity		pC/ms^{-2}	1
Frequency range	±5%	Hz	0.5~10000
Mounting Resonance		KHz	32
Transverse Sensitivity		%	<3
Operating Temperature		℃	-50~250
Weigh		gram	25
Dimension		mm	13x25x20

5. VS 200 Series Accelerometers - Economic Version

- Annular shear design with 2 sensitivities: 1 pC/ ms^{-2} and 3 pC/ ms^{-2}
- Top output connector with 2 metric threads: M5 and M6
- Choices of isolated and non-isolated mounting base
- Offer side output connector as customer special


Specifications:

Model		Unit	23108	23110	23111	23112	24108	24110	24111	24112
Sensitivity		pC/ms^{-2}	1	1	1	1	3	3	3	3
Frequency Range ±10%		Hz	0.5~10000	0.5~9000	0.5~10000	0.5~9000	0.5~8000	0.5~7000	0.5~8000	0.5~7000
Mounting Resonance		KHz	30	25	30	25	25	23	25	23
Measurement Range		m/s^2	20000							
Capacitance		pF	700							
Operating Temperature		℃	-50~160							
Base Insulation Resistance		Ω	0	$>10^8$	0	$>10^8$	0	$>10^8$	0	$>10^8$
Output Connector			M5	L6	M5	M5	M5	L6	M5	M5
Weight		gram	15	15	15	15	25	25	25	25
Dimension	HexxHxC	mm	13x19x26	17x21x27	13x19x26	17x21x27	17x21x27	17x21x27	17x21x27	17x21x27