

Accelerometer

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EMIC offers many kinds of accelerometers available for various vibration measurements. They are ultra small, light weight accelerometers for highly precise measurements. A special tri-axial accelerometer for simultaneously measuring a vibration in three orthogonal axes is available. A large output accelerometer for measuring earthquakes and a suitable accelerometer for measuring and analyzing building structures.

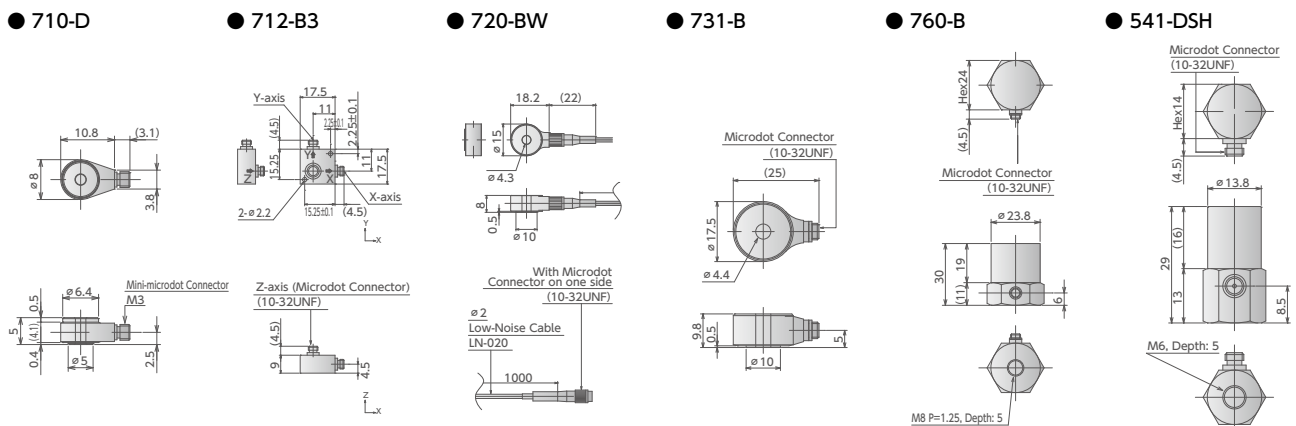


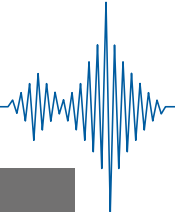
Specification

Model	710-D	712-B3	720-BW	731-B	760-B	541-DSH
Type	Small/Light Weight	Tri-axial	Water-proof	General Purpose	Large Output	High Temperature
Dimensions mm	φ8×5	17.5W×9HX17.5D	φ15×8	φ17.5×9.8	24 _{HEX} ×30	14 _{HEX} ×29
Feature	Vibration measurement and modal analysis on small object	Simultaneous dynamic measurement in three orthogonal axes on small object	Center hole type suited to narrow space. Water-proof against 0.6 MPa	Center hole type suited to attach to narrow space. Side connector for easily routing cable	Most suited to low acceleration measurement on building and structure	Most suited to measurement at high temperature such as combined environmental test
Sine Vibration Limit m/s ²	5000	5000	5000	5000	1250	—
Shock Limit m/s ²	10000	10000	10000	15000	2500	16000
Mass g	1.9	14	11	13.5	98.6	35
Frequency Response* Hz	Up to 20k±3dB	Up to 8k±1dB	Up to 8k±1dB	Up to 7k±1dB	Up to 3.5k±1dB	Up to 5k
Charge Sensitivity pC/(m/s ²)	0.2±15%	0.347±20%	1.33±20%	3.67±20%	35±20%	5.0±20%
Mounted Resonance Hz	More than 60k	More than 25k	More than 26k	38k±5	13.5k±4	More than 27k
Temperature Range °C	-50 to +160	-50 to +160	-20 to +120	-50 to +160	-20 to +120	-20 to +250
Construction	Piezoelectric Shear	Piezoelectric Shear	Piezoelectric Shear	Piezoelectric Shear	Piezoelectric Shear	Piezoelectric Compression
Capacitance pF	1200±20%	750±25%	1900±25%	1900±25%	1500±25%	1000
Transverse sensitivity	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%
Piezoelectric material	Pb(Zr·Ti)O ₃	Pb(Zr·Ti)O ₃	Pb(Zr·Ti)O ₃	Pb(Zr·Ti)O ₃	Pb(Zr·Ti)O ₃	Pb(Zr·Ti)O ₃
Case Material	Stainless	Titanium	Stainless	Titanium	Stainless	Stainless
Mounting	M2 thru, adhesive	M2 thru, adhesive	M4 thru	M4 thru	M8×5 Internal thread	M6×5 Internal thread
Cable/Adapter(Micro BNC)	AC-7020-BM(BLM-001)	AC-8030-AB×3	Integral 1 mBNC w/plug	AC-8030-AB	AC-8030-AB	AC8020-ABH High temp.




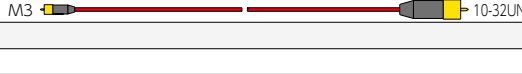
* Low-frequency response frequency is dependent on the charge vibration meter.

Outline View





Accelerometer Cable

Product Description	Model	Cable Outline
Microdot Plug - BNC Plug Accelerometer Cable (2 m)	AC-8020-AB	
Microdot Plug - BNC Plug High Temp. Acc. Cable (2 m)	AC-8020-ABH	
Microdot Plug - BNC Plug Accelerometer Cable (3 m)	AC-8030-AB	
Microdot Plug - BNC Plug High Temp. Acc. Cable (3 m)	AC-8030-ABH	
Microdot Plug - BNC Plug Accelerometer Cable (5 m)	AC-8050-AB	
Microdot Plug - BNC Plug High Temp. Acc. Cable (5 m)	AC-8050-ABH	
Microdot Plug - BNC Plug Accelerometer Cable (10 m)	AC-8100-AB	
Microdot Plug - BNC Plug High Temp. Acc. Cable (10 m)	AC-8100-ABH	
Microdot Plug - Microdot Plug Accelerometer Cable (2 m)	AC-8020-AM	
Microdot Plug - Microdot Plug High Temp. Acc. Cable (2 m)	AC-8020-AMH	
Microdot Plug - Microdot Plug Accelerometer Cable (3 m)	AC-8030-AM	
Microdot Plug - Microdot Plug High Temp. Acc. Cable (3 m)	AC-8030-AMH	
Microdot Plug - Microdot Plug Accelerometer Cable (5 m)	AC-8050-AM	
Microdot Plug - Microdot Plug High Temp. Acc. Cable (5 m)	AC-8050-AMH	
Microdot Plug - Microdot Plug Accelerometer Cable (6 m)	AC-8060-AM	
Microdot Plug - Microdot Plug High Temp. Acc. Cable (6 m)	AC-8060-AMH	
Microdot Plug - Microdot Plug Accelerometer Cable (10 m)	AC-8100-AM	
Microdot Plug - Microdot Plug High Temp. Acc. Cable (10 m)	AC-8100-AMH	
Mini-microdot Plug - Microdot Plug Acc. Cable (2 m)	AC-7020-BM	
Extension Cable (Every 1 m)	-	
Conversion Adapter (BNC Plug - Microdot Jack)	BLM-001	

Insulated Mounting Stud

Product Description	Model
Insulated Stud for 540-DT	RS-171D
Insulated Stud for 710-D	TJ-1026AC

Product Description	Model
Insulated Stud (M5) for 731-B	RS-171B14C6
Insulated Stud (M6) for 731-B	RS-171B14D6

Accelerometer Set

In addition to the accelerometer body, this set includes all required accessories such as dedicated cables and insulators.



Accelerometer Set

Product Description	731-B Accelerometer Set 3 m		731-B Accelerometer Set 6 m	
Model	731-B(FSET3m)		731-B(FSET6m)	
Contents of Set	Accelerometer	731-B	Accelerometer	731-B
	Accelerometer Cable	AC-8030-AM	Accelerometer Cable	AC-8060-AM
	Microdot - BNC Adapter	BLM-001	Microdot - BNC Adapter	BLM-001
	Insulated Stud	RS-171B14C6	Insulated Stud	RS-171B14C6

Product Description	Built-in Set for 902 Vibration Generator		Built-in Set for 903 Vibration Generator	
Model	BIN-PU902SET		BIN-PU903SET	
Contents of Set	Accelerometer	540-DS	Accelerometer	540-DS
	Accelerometer Cable	AC-8030-AM	Accelerometer Cable	AC-8030-AM
	Microdot - BNC Adapter	BLM-001	Microdot - BNC Adapter	BLM-001
	Insulator		Insulator	541AR-5100
	Set Screw		Set Screw	M6x10

Product Description	Built-in Set for 906 Vibration Generator		Built-in Set for BD Vibration Generator	
Model	BIN-PU906SET		BIN-PUBDSET	
Contents of Set	Accelerometer	540-DS	Accelerometer	731-B
	Accelerometer Cable	AC-8030-AM	Accelerometer Cable	AC-8030-AM
	Microdot - BNC Adapter	BLM-001	Microdot - BNC Adapter	BLM-001
	Set Screw	M6x10	Insulated Stud	RS-171B14C6