



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai - 400076

**Technical Specification for Broadband Seismograph**

PR No. 1000027100

Rfx No. 6100001210

A complete broadband seismograph which comprises a broadband 3-component seismometer (non-compact), 24-bit 3-Channel digitizer with essential accessories.

Number of seismographs: 01

**Seismometer (1 x 1)**

Topology	Feedback	Frequency response	Sensitivity	Noise	Power
Broadband tri-axial seismometer (non-compact) An automatic mass recentring capability	Force-balance	120 s-50 Hz	$\geq 1000$ V/m/s	Minimum noise level (from 100 s-1Hz)	<1W at 12V

**DAS: 24-bit 3-Channel Digitizer (1 x 1)**

No. of Channel	Sampling rate	ADC resolution	RAM	Dynamic Range	Data Acquisition Mode	Storage Type	Recording format	GPS	Power	Indicator LED
3-channels	User-selectable (200,100,50,20,10)	24bit	At least 128 Mb	$\geq 140$ dB @ 100 sps	Continuous	Internal plus removable card > 8Gb	Mini-seed	GNSS	9 -24 VDC	System Status, Power, GPS and Sensor



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**Essential Accessories**

Seismometer cable	Seismometer Cover	Carrying Case	GPS	DAS Power cable	Storage	Ethernet
10 meter long -01 no.	Thermal Insulation cover – 01 no.	Fiber /Plastic Material-01no.	20 metre long cable with GNSS — 01 no.	2 meter --01 no.	32 GB SD Card --02 no.	2 meter cable –1 no.

**Warranty is one year from the date of installation and commissioning.**

**Note: While calibrating during installation process and during transportation legs of the seismometer should not come out then it is very difficult to put it back to the original position.**