



INDIAN INSTITUTE OF TECHNOLOGY  
BOMBAY MATERIALS MANAGEMENT  
DIVISION  
Powai, Mumbai 400076.

Ref No.(PR No. 1000038402)

(Rfx No. 6100001674)

**Technical Specifications of HAADF detector (Spares for Themis-300 instrument)**

Sr.No	Technical Specifications	Compliance (Yes/No)
01	<p>TEM mounting – 35 mm camera port TEM operating voltage - &lt;300 kV Alignment accuracy - &lt; 0.05 mm vs. electron optic axis Repositioning accuracy - &lt;0.1 mm after retraction/insertion, no interference in retracted position Mechanical accuracy – Adjustable over 1.5 mm X 1.5 mm in horizontal plane Tolerances - , 99.0=/- 0.1 mm between interface surface and optic axis Sensor – PMT XP2012, Philips code 9300- 855- 60112 Scintillator – Single crystal YAP (0.5mm) Optical coupling – Light guide assembly with oil free interfacing Usable area – 28 mm diameter @45<sup>0</sup> Vacuum – Pumped via TEM, leak rate &lt; 10<sup>-6</sup> mbar/ l s Electrical – Connections from PMT socket to TEM Pneumatics - Air tight connection from TEM pressurized air supply</p> <p>Warranty : 90 days</p>	