






**Ministry of Culture**  
**Government of India**  
**National Council of Science Museums**  
**33 Block GN, Saltlake Sector V**  
**Bidhannagar, Kolkata 700 091**

TENDER NO. I-18012/7/23(131)

Technical Specification

**1) Supply, Installation, Testing and Commissioning of 11” Optical Telescope at IGSC Planetarium Patna as per below mentioned specifications:**

**11" SCT Telescope with CGEM II Equatorial Mount - 1 Set**

*Make: Celestron/Meade/Sky-Watcher/Unistellar or equivalent*

***Optical Tube:***

11" (279.4mm) aperture, f/10 focal ratio, 2800mm effective focal length  
Schmidt-Cassegrain design optical path, StarBright XLT optical coatings  
Resolution: 0.5 arcsec (Rayleigh); 0.42 arcsec (Dawes)  
Secondary mirror obstruction: 3.75" (95 mm); 34% by diameter; 12% by area

***StarBright XLT System:*** Maximizes light transmission through optical path  
Improves color rendition, contrast, sharpness, resolution, and brightness.

***Mounting:*** Optical tube only—mount and tripod required for proper use

***Included Accessories***

Visual back: Standard threads for Schmidt-Cassegrain telescope optical tubes  
1.25" holder accepts 1.25" eyepieces and accessories.

Eyepiece: 1.25"-diameter barrel, Accepts most 1.25" astronomical filters.

Eyepiece: 25 mm & 40 mm focal length,

Zoom Eyepiece – 8.24 mm

Micro Guide Eyepiece: 12.5 mm

Diagonal: 1.25"-diameter barrel, 90° angle places head in comfortable viewing position when scope is aimed at or near the zenith, Star diagonal corrects view horizontally, but not vertically.

Finderscope: 9x magnification, 50mm aperture, Mounting bracket included

***CGEM II GoTo German Equatorial Mount***

***Mount***

40-pound payload capacity. Dedicated autoguider port for making corrections. Runs on the included 12V DC power cord

**Motors:** Dual-axis low-cog DC servo motors, High-torque motors for helping to smoothly drive heavier loads. Clutch levers for manual movement, levers are longer than normal to make tightening and loosening easier

***NexStar+ Hand Controller***

40,000+ object database with filters for creating custom object lists  
100 user-defined programmable celestial or terrestrial objects  
Enhanced information on over 200 objects  
Nine slew speeds: 4°/sec, 2°/sec, 1°/sec, 0.3°/sec, 32x, 16x, 8x, 4x, 2x  
Three tracking rates: Sidereal, Solar, Lunar  
Built-in polar alignment program to polar align on any star in the sky  
Sky Tour Mode, Identify Mode, Anti-backlash compensation, Permanent Periodic Error Correction (PPEC).  
4-line, 18-character LCD display with a 19-button fiber-optic backlit LED keypad  
RS-232 communication port on hand control to control the telescope via a personal computer.  
Should supports English

***Database Details:***

Solar system: Seven planets, moon, sun, and Pluto  
Custom lists of all the brightest stars, double stars, variable stars, and asterisms  
Custom lists of galaxies, nebulae, and clusters, as well as the complete Messier catalog and select NGC objects.

***CGEM II Tripod with 17 lb Counterweight***

***17 lb Counterweight for the CGEM EQ Mount***

***AC Adapter, CGEM, CGE chepRO***

***Warranty:*** Manufacturer's standard On-site Warranty minimum one year to be provided at Patna (Bihar) from the date of SITC of the same at IGSC Planetarium, Patna (Bihar). Details of infrastructure for after sales support is to be furnished clearly. The Agency shall be responsible for all defects of materials including defective workmanship, use of defective materials etc. for the entire warranty period.

*Make & Model Offered:* \_\_\_\_\_

(To be entered by bidder)