

## 2. Telescope specifications

Position	Short Description	price (EUR)
<b>1. 1m Telescope</b>		
Optics	<ul style="list-style-type: none"> <li>- Lomo Cassegrain optic</li> <li>- <math>\geq 1000</math> free optical diameter</li> <li>- 1025mm mechanical diameter</li> <li>- Mirror material of all 3 mirrors Astro-Sital with near-zero expansion</li> <li>- primary mirror L/6 peak to valley at 400nm</li> <li>- System optical quality L/6 peak to valley at 400nm</li> <li>- primary focal ratio f/3</li> <li>- uncorrected system focal ratio f/10 (10m focal length)</li> <li>- Reflectivity of Secondary and tertiary mirror 95%</li> <li>- Reflectivity of main mirror 90%.</li> <li>- Focal plane position 250mm from flange</li> </ul>	
Tube	<ul style="list-style-type: none"> <li>- Truss Tube</li> <li>- Lasalle main mirror support</li> <li>- 1 Nasmyth focus design</li> <li>- computer controlled focusing</li> <li>- focus range +150, -50mm from nominal focus distance</li> <li>- mirror covers manual</li> <li>- unvignetted field <math>&gt;20</math> arc minutes (64mm diameter)</li> </ul>	
Mount	<ul style="list-style-type: none"> <li>- AltAz mount</li> <li>- high accuracy friction servo-drives</li> <li>- external Heidenhain-Encoders with <math>&lt;0.08''</math> resolution</li> <li>- Servomotor Encoders with <math>&lt;0.08''</math> resolution</li> <li>- 2.5 degree per second maximum slew rate</li> <li>- Eigen frequency above 10 Hz</li> <li>- The telescope fits into a hemisphere with minimum 4.1m inside diameter</li> <li>- Total telescope weight appr. 1.600 kg</li> </ul>	

Telescope control system and software	<ul style="list-style-type: none"> <li>- Industrial PC, &gt; 2.3 GHz with all necessarily PC cards, mouse and keyboard, Monitor for the TCS Autoslew</li> <li>- 32bit Win controll software Autoslew</li> <li>- Full vb-scripting via ActiveX possible for telescope, focuser, rotator and mirror covers</li> <li>- Minimum elevation -3 degree</li> <li>- &lt;30 arc seconds pointing (&lt;10 arc seconds RMS) for &gt;15 and &lt;80 degree elevation (after calibration with pointing model).</li> <li>- &lt;60 arc seconds pointing (&lt;20 arc seconds RMS) for 3-85 degree elevation (after calibration with pointing model)</li> <li>- &lt;1.5 arc seconds RMS blind guiding for &gt;15 degree and &lt;80 degree elevation over 5 minutes tracking time</li> <li>- &lt;2.5 arc seconds RMS blind guiding for &gt;3 degree and &lt;85 degree elevation over 5 minutes tracking time</li> <li>- &lt;0.5 arc seconds RMS guiding with any offset guider for &gt;3 and &lt;85 elevation</li> <li>- Software limit switch and hardware switch for rotation (to prevent cable damage). Overlap &gt;180 degree.</li> <li>- Hardware limit switch for altitude (horizon limit, zenith limit)</li> <li>- Dome control (ASCII, RS232, or ASCOM)</li> <li>- Focusing, autofocus possible for supported cameras</li> <li>- Temperature compensation of the focus drift</li> <li>- large object database (NGC, IC; UGC, PK)</li> <li>- RA, DE input</li> <li>- Orbital elements input for pointing and speed correction of fast moving objects</li> <li>- Input coordinates can be freely selected</li> <li>- Joystick Control of Telescope and Focus</li> </ul>	
	<ul style="list-style-type: none"> <li>- ACL (Astronomical Command Language) for external remote control of the telescope, with RS232 or LAN</li> <li>- Import of custom database possible</li> <li>- 2 year update service for software enhancements</li> <li>- Automatic calibration of the telescope</li> </ul>	
Installation	<ul style="list-style-type: none"> <li>- Without packaging, transportation, insurance, setting into operation, testing, travel costs</li> </ul>	

Optional:

Derotator	- 20kg maximum Load, needed for CCD	
RC	- RC optic set instead of classical Cassegrain	
Reducer	- To f/6.7 for CCD	
Installation	- Costs per day + Flight + Lodging	

**Telescope Size**

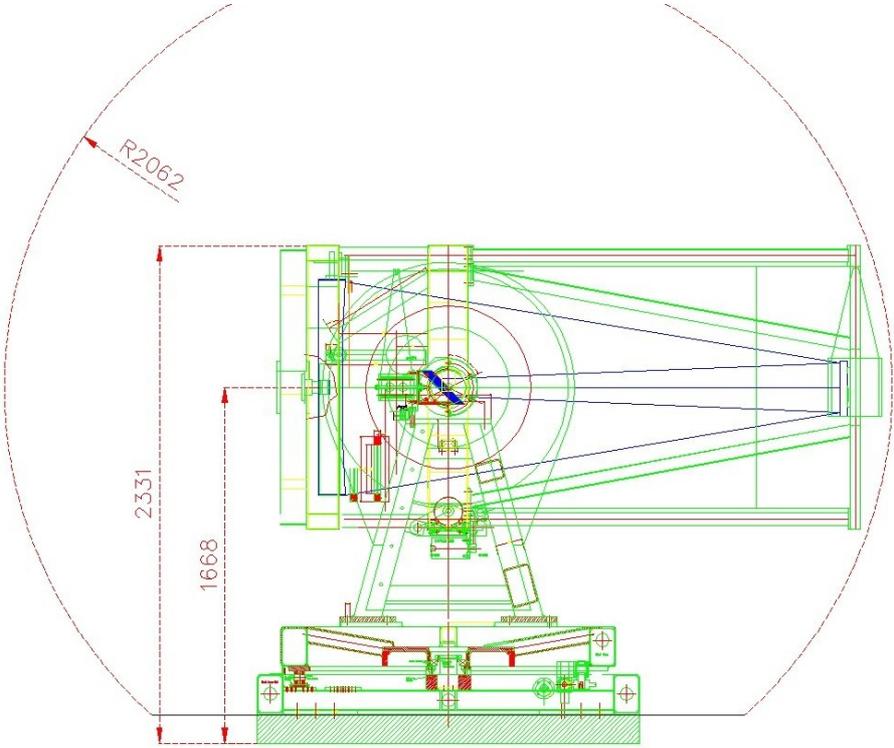


Image of 1m Stockholm Telescope (exactly a copy what you will get)