

RFP QUESTIONS AND ANSWERS

File: W6369-23-X024

Initiative: Two (2) Optical Telescopes

RFP Issued: 2023-07-24

RFP Closed: 2023-08-18 at 14:00 Eastern Daylight Time (EDT).

Number	Questions/Answers/Amendments	Date Received/ Replied
Question 1:	With respect to the Operating wavelength specification, would Canada accept a range of 400 – 700 nm?	Wed 2023-08-09 13:55
Answer 1:	See Amendment 1.	Thu 2023-08-10
Question 2:	With respect to the System Transmission specification, would Canada accept an average transmission of 75%?	Wed 2023-08-09 13:55
Answer 2:	See Amendment 1.	Thu 2023-08-10
Question 3:	Would Canada accept delivery before March 31, 2024?	Wed 2023-08-09 13:55
Answer 3:	As per section 6.14 Shipping Instructions of the RFP, DND will be responsible for shipping the goods. The Contractor will be responsible for ensuring the deliverables are ready for pick-up by the date indicated in the RFP. The goods must be delivered and accepted before or on 31 March 2024.	Thu 2023-08-10

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Amendment 1:	<p>RFP W6369-23-X024 is hereby amended as follows: DELETE section 4.1 of Annex A, in its entirety. INSERT the following as section 4.1 of Annex A:</p> <p><u>4.1 Optical Telescope Tube Assemblies</u></p> <p>Required quantity: 2</p> <p>The Contractor must provide the Optical Telescope Tube Assemblies with the following specifications:</p> <table border="1" data-bbox="272 636 1286 1986"> <thead> <tr> <th>Specifications</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Optical aperture diameter</td> <td>Minimum: 20 inch (504 mm)</td> </tr> <tr> <td>Focal length</td> <td>Minimum: 3300 mm, Maximum: 3600 mm</td> </tr> <tr> <td>Operating wavelength</td> <td>Visible to Near Infrared (VNIR): 400 – 700 nm</td> </tr> <tr> <td>System Transmission</td> <td>Average of 75%</td> </tr> <tr> <td>RMS Spot size</td> <td>On axis: maximum of 5 microns 25 mm off axis: maximum of 10 microns</td> </tr> <tr> <td>Vignetting</td> <td>Maximum: 20% measured 25 mm off-axis</td> </tr> <tr> <td>Image circle</td> <td>Minimum: 52 mm</td> </tr> <tr> <td>Back focus distance</td> <td>Minimum: 200 mm, Maximum 250 mm</td> </tr> <tr> <td>Optical tube weight</td> <td>Maximum: 150 lbs (72.5 kg)</td> </tr> <tr> <td>Optical assembly overall length ready for robotic mount integration</td> <td>Maximum: 1325 mm</td> </tr> <tr> <td>Optical assembly Overall width including mount interface</td> <td>Maximum: 725 mm</td> </tr> <tr> <td>Central obstruction</td> <td>Secondary mirror diameter not to exceed 40% of primary mirror diameter</td> </tr> <tr> <td>Optical tube material</td> <td>-Carbon Fiber to minimize focus shift when operating telescope spanning temperatures spanning -30°C to +30°C. -Other materials accepted if demonstrated that thermal focus shift is within 20% of Carbon Fibre.</td> </tr> <tr> <td>Power</td> <td>Auxiliary telescope equipment such as dew heaters or fans must accept 120 VAC to vendor provided power adapters</td> </tr> <tr> <td>Focal ratio</td> <td>Must be compatible with corrector lens / focal extender to extend focal length by minimum 12%</td> </tr> <tr> <td>Backplane</td> <td>Must be compatible with 2" nose piece for Finger Lakes Kepler 4040 Camera</td> </tr> <tr> <td>Dovetail accessory accommodation</td> <td>Telescope assembly must accommodate a Losmandy D astronomy dovetail for piggybacked cameras</td> </tr> <tr> <td>Dew prevention</td> <td>Must provide a dew heater accessory in 5.2</td> </tr> <tr> <td>Fans</td> <td>Optional -Fans must be "field replaceable" if part of telescope assembly</td> </tr> <tr> <td>Optical tube construction</td> <td>Truss style telescope must accommodate a flexible shroud accessory to minimize dust/straylight from entering the optical path.</td> </tr> <tr> <td>Integration</td> <td>-Optical telescope must be compatible with the Planewave L500 mount operating in altitude-azimuth mode centered within a 10.5 ft Ash Dome. -Telescope must be suitable for remote, unattended robotic operation for data acquisition on Earth orbiting satellites without manual adjustment of focus, collimation, or other optical configuration prior to unattended use.</td> </tr> <tr> <td>Software</td> <td>Must provide Software release support and patches (as applicable).</td> </tr> <tr> <td>Crating</td> <td>Appropriate crating of Optical Telescope Tube Assemblies to ensure goods are protected during transportation.</td> </tr> </tbody> </table>	Specifications	Value	Optical aperture diameter	Minimum: 20 inch (504 mm)	Focal length	Minimum: 3300 mm, Maximum: 3600 mm	Operating wavelength	Visible to Near Infrared (VNIR): 400 – 700 nm	System Transmission	Average of 75%	RMS Spot size	On axis: maximum of 5 microns 25 mm off axis: maximum of 10 microns	Vignetting	Maximum: 20% measured 25 mm off-axis	Image circle	Minimum: 52 mm	Back focus distance	Minimum: 200 mm, Maximum 250 mm	Optical tube weight	Maximum: 150 lbs (72.5 kg)	Optical assembly overall length ready for robotic mount integration	Maximum: 1325 mm	Optical assembly Overall width including mount interface	Maximum: 725 mm	Central obstruction	Secondary mirror diameter not to exceed 40% of primary mirror diameter	Optical tube material	-Carbon Fiber to minimize focus shift when operating telescope spanning temperatures spanning -30°C to +30°C. -Other materials accepted if demonstrated that thermal focus shift is within 20% of Carbon Fibre.	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