

# DELTARHO 500



## Primary Mirror

Optical Diameter	20 inches (508 mm)
Outer Diameter	20.8 inches (528mm)
Shape	Prolate ellipsoid
Material	Fused silica (quartz)
Coating	Enhanced aluminum – 96%

## Secondary Mirror

Diameter	286 mm (11.26 inch)
Material	Fused silica (quartz)
Shape	Spherical
Coating	Enhanced aluminum – 96%

## Lens Group

Diameter	160 mm (6.3 inch) Largest Lens
Number of Lenses	Three
Coating	Broadband AR Coatings (on avg. less than .5% reflected from 400 to 700 nm)

## Optical System\*

Aperture	508 mm
Focal Length	1537 mm
Focal Ratio	f/3
Central Obstruction	59% by diameter
Back Focus	9.166 in (232.8 mm) from mounting surface; 7.271 in (184.7 mm) from lens cell
Weight	165 lbs
OTA Length	35.1 in (892 mm)
Optical Performance (Spot Diameter)**	3.86-mircon RMS on axis 4.04-mircon RMS at 22 mm off-axis 6.04- micron RMS at 35 mm off-axis
Telescope Cage	Carbon fiber truss poles with carbon fiber shroud

\*Specifications subject to change

\*\*Optical performance based on design, real-world performance may vary.

## SUGGESTED ACCESSORIES



L-500 MOUNT



SERIES-5 ROTATOR



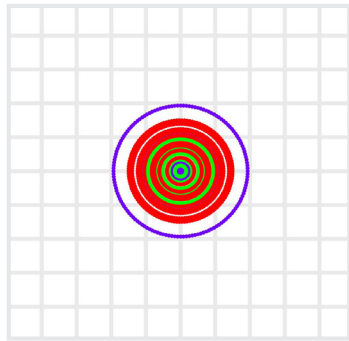
SERIES-5XL FOCUSER



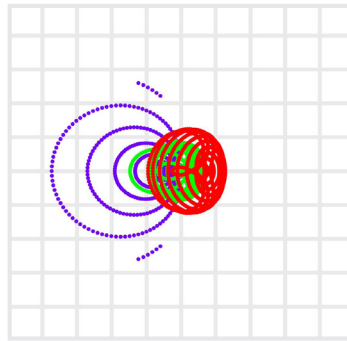
SERIES-5 CONTROLLER

# OPTICAL DESIGN SPOT DIAGRAM DELTARHO 500\*\*

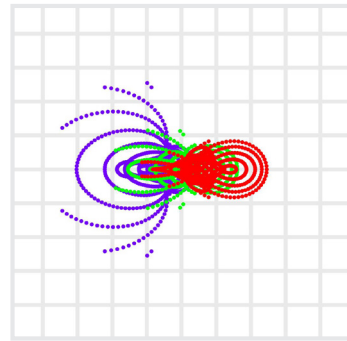
\*\*Optical performance based on design, real-world performance may vary.



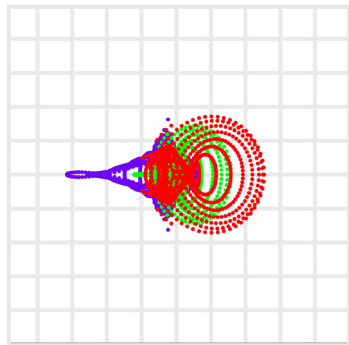
Distance Off-Axis = 0 mm  
RMS Spot Size (radius) = 1.84 microns



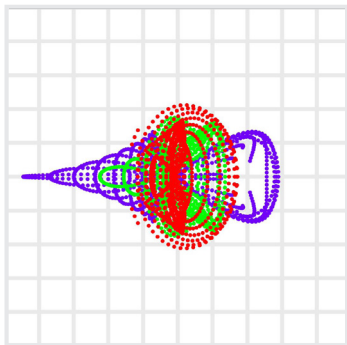
Distance Off-Axis = 10.74 mm  
RMS Spot Size (radius) = 1.84 microns



Distance Off-Axis = 21.53 mm  
RMS Spot Size (radius) = 2.02 microns

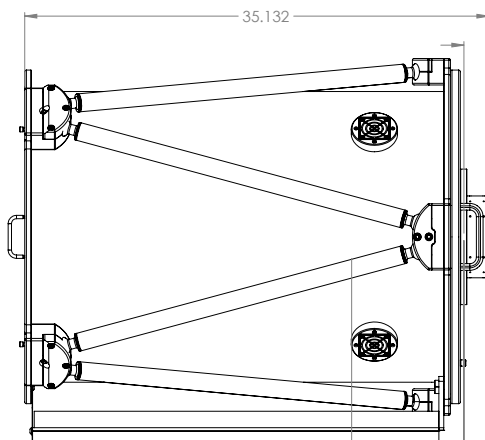
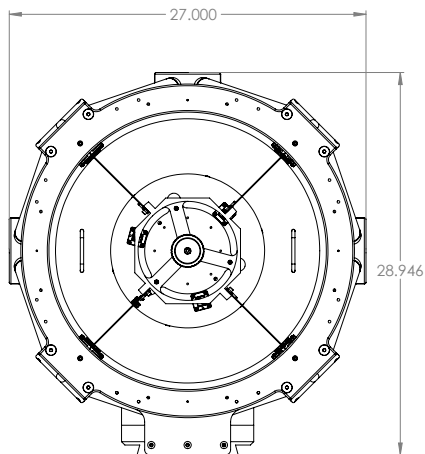


Distance Off-Axis = 30.23 mm  
RMS Spot Size (radius) = 1.98 microns



Distance Off-Axis = 35.44 mm  
RMS Spot Size (radius) = 3.19 microns

↕ = 2 microns



9.183  
MOUNTING SURFACE  
TO CENTER OF MASS

1.895  
MOUNTING SURFACE  
TO BACK OF LENSCELL

9.166  
BACK FOCUS

