

Clifton Cameras Product Specification

Celestron NexStar Evolution 5 Inch SCT Telescope Full Spec

OPTICAL TUBE INFO:

Optical Design:	Schmidt-Cassegrain
Aperture:	125mm (5")
Focal Length:	1250mm (49")
Focal Ratio:	f/10
Focal Length of Eyepiece 1:	40mm (1.57")
Magnification of Eyepiece 1:	31x
Focal Length of Eyepiece 2:	13mm (.51")
Magnification of Eyepiece 2:	96x
Finderscope:	StarPointer™ red dot finderscope
Star Diagonal:	90° Prism - 1.25"

OPTICAL TUBE INFO:

Optical Tube:	Aluminum
Highest Useful Magnification:	295x
Lowest Useful Magnification:	18x
Limiting Stellar Magnitude:	13
Resolution (Rayleigh):	1.11 arc seconds
Resolution (Dawes):	0.93 arc seconds
Light Gathering Power (Compared to human eye):	329x
Secondary Mirror Obstruction:	51mm (2")
Secondary Mirror Obstruction by Diameter:	40%
Secondary Mirror Obstruction by Area:	17%
Optical Coatings:	StarBright XLT

OPTICAL TUBE INFO:

Optical Tube Length:	330mm (13")
Optical Tube Diameter:	152mm (6")
Optical Tube Weight:	10 lbs (4.54 kg)
Dovetail:	CG-5 Dovetail bar

MOUNT INFO:

Mount Type:	Computerized Altitude-Azimuth Single Fork Arm
Instrument load capacity:	25 lbs (11 kg)
Height adjustment range (includes mount and tripod):	1193.8mm - 1752.6mm (47" – 69")
Tripod Leg Diameter:	31.75mm (1.25") Stainless Steel
Mount Head Weight:	16 lbs (7 kg)
Accessory Tray:	Yes

OPTICAL TUBE INFO:

Tripod Weight:	12 lbs (5.44 kg)
Slew Speeds:	9 slew speeds - max speed 4°/second
Tracking Rates:	Sidereal, Solar and Lunar
Tracking Modes:	Alt-Az, EQ North and EQ South
GPS:	N/A
Dovetail Compatibility:	CG-5 saddle plate
Number of Auxiliary Ports:	4 AUX Ports (Hand Control can use any of the AUX Ports)
Autoguide Port:	No
USB Port:	Yes, Hand Control input and Mount output
Power Requirements:	Internal 9 6V, 4 5Ah lithium iron phosphate battery (LiFePO4)
Motor Drive:	DC servo motors



OPTICAL TUBE INFO:

Alignment Procedures:

SkyAlign, 1-Star Align, 2-Star Align, Auto 2-Star Align,

Solar System Align, Quick-Align, Last Alignment,

EQ North / EQ South Alignment (EQ align requires an equatorial wedge)

Periodic Error Correction:

No

Computerized Hand Control:

2 line x 18 character backlit Liquid Crystal Display,

19 LED backlit buttons, USB 2.0 Port for PC connection

NexStar+ Database:

Over 40,000 including 220 of the best deep sky and solar system objects

Software:

Celestron Starry Night Special Edition Software and SkyPortal App

Total Kit Weight:

38 lbs (17.23 kg)

Included Items:

Optical tube
Single Fork Arm Mount and Tripod
Accessory Tray
Built-in Wifi
Integrated Lithium-iron battery
NexStar+ Hand Control
40mm and 13mm eyepiece
Red dot finderscope
Visual Back
Star Diagonal
4 plug AC adapter