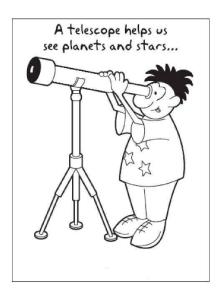
PROJECT PROPOSAL TO CUFSAA



Request for an Astronomical telescope to the Department of Physics,
University of Colombo, Colombo-03

for the activities of

Astronomy and Space Science Unit, Department of Physics, University of Colombo, Si Lanka

and

Astronomical Society of Faculty of Science

University of Colombo, Sri Lanka

2017.10.28

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1.0 Executive Summary

Understanding of nature and generates fundamental knowledge needed for the development of new instrumentation and technological advances that will continue to drive the economic engines of the country.

This proposal is on requesting a telescope for the Faculty of Science, Department of Physics, University of Colombo mainly for 1) astronomy popularization and public outreach programmes that we conduct through the Astronomy and Space Science Unit(ASSU) of the Department of Physics jointly with the support of the university students in the University of Colombo Astronomical Society (Astrosoc), 2) for undergraduate research work of special degree project work, and 3) as a teaching aid for Astronomy Course unit offered by Department of Physics for the level-3 general degree students.

In the case of astronomy public outreach programmes conducted in Sri Lanka, University of Colombo ASSU and Astrosoc play a major role. Last year alone we had more than 15 astronomical night sky observational camps at educational district level in several remote areas. We cover the whole island from Jafna, Anuradhapura, Trincomalle, Batticaloa, Hambantota etc. We cater for several other national organizations like Sri Lanka Association for the Advancement of Science (SLAAS-CPS) and National Science Foundation (NSF) to conduct all their night sky astronomical observation camps for school children at district level, training of students for the national and international olympiad on Astronomy and Astrophysics, National Institute of Education (NIE) for teachers training programmes and for conducing and guiding astronomy activities in other local universities like the universities of Rajarata, Kelaniya, Sri Jayewardenepura, The Eastern University of Sri Lanka and the Open University of Sri Lanka. We only have three small telescopes donated by well-wishers and purchased from our individual private funds to do all these activities. For not having a large telescope, we feel embarrassed to conduct such public activities under the banner of Colombo University.

Two telescopes quoted here are based on amazon.com prices. We recommend the Option -1 Meade Instruments LX90-ACF 12-Inch (f/10) Advanced Coma-Free telescope as it is 12- inch in diameter (and also the lowest price too – USD 4541.38) compared to the Option-2 (Celestron CPC 1100 StarBright XLT GPS Schmidt-Cassegrain 2800mm Telescope, Price USD 4,732.49), which is only 11-inch diameter.

This recommendation was also based on the comments and suggestions made by Dr. Nalin Samrasinghe after reviewing the specifications of the two telescopes based on the non-sidereal rate imaging capability of Meade telescope having relevant tracking rates for both solar system and deep sky objects usefull for research purposes of university undergraduate students.

However, we have no objection for any decision taken by the CUFSAA in selecting either Option1 (Meade 12" telescope) or Option-2(Celestron 11" telescope) or reducing the accessories mentioned in the order lists (amazon.com) arranged in priority order, based on the availability of funds.

2.0 General Introduction and Justification

In the case of astronomy public outreach programmes conducted in Sri Lanka, University of Colombo ASSU and Astrosoc play a major role. Last year alone we had more than 15 astronomical night sky observational camps at educational district level in several remote areas. We cover the whole island from Jafna, Anuradhapura, Trincomalle, Batticaloa, Hambantota etc. The demand is high as Arthur C Clarke Institute has curtailed (or more or less stopped) its outreach programmes of astronomy. We cater for several other national organizations like Sri Lanka Association for the Advancement of Science (SLAAS-CPS) and National Science Foundation (NSF) to conduct all their night sky astronomical observation camps for school children at district level, training of students for the national and international olympiad on Astronomy and Astrophysics, for the National Institute of Education (NIE) teachers training programmes and for conducing and guiding astronomy activities in the universities of Rajarata, Kelaniya, Sri Jayawardanepura, The Eastern University of Sri Lanka and the Open University of Sri Lanka. We only have three small telescopes donated by well wishers and purchased from our individual private funds to do all these activities. For not having a large telescope, we feel embarrassed to conduct such public activities under the banner of Colombo University. When consider the newly started astronomy research area in the university, in the recent past more than ten astronomy related special degree undergraduate projects have been completed and many are in collaboration with the Arthur C Clarke Institute for Modern Technologies, in Katubedda, Moratuwa. More recently we have started Astronomy, Astrophysics and Space science postgraduate degree (MPhil and PhD) programmes in collaboration with several foreign universities. We already have over 30 publications in this field. A telescope of the proposed nature can be used to initiate several undergraduate student research projects as a part of their special degree programme.

3.0 Astronomy and Space Science Unit (ASSU), Department of Physics, University of Colombo

3.1 Introduction

The necessity of establishing an Astronomy and Space Science Unit under the Department of Physics, University of Colombo was a long felt need and after untiring efforts, it was established on 2016.07.13. The main objective of the unit is to enhance the astronomy, astrophysics and space science related research and education in Sri Lanka. Currently there is no such Astronomy department or a unit in the Sri Lankan university system to cater this need. In 2005 - the first ever astronomy course in the recent history started in a Sri Lankan university for Science undergraduates in the Department of Physics, University of Colombo. The Sri Lankan scientist who received wide publicity for being a team member of the US research group who discovered gravitational waves recently was a product of this 1st Astronomy course started in 2005. In 2012 we started to cater a similar Astronomy course unit for the final year BSc students in the Open University of Sri Lanka.

Committee for the Popularisation of Science (CPS) of the Sri Lanka Association for the Advancement of Science currently conducts its outreach programmes on astronomy in remote districts like Jaffna, Vanuia, Batticaloa, Amparei etc. solely through the telescopes and resources from the Astronomical Society of th Department of Physics, University of Colombo. Similar services are provided by us to the NSF popscience activities at school level. All-island astronomy quiz competition and more than 15 astronomical observations camps conducted annually at school level are some of our science outreach programmes carryout with the help of the Department's Astronomical Society. We also provide programme

development and technical support to the other organisations like Sri Lanka Planetarium and Arthur C Clarke Institute for Modern Technologies.

The University possess a good historical background also to establish an Astronomy Unit and start its astronomical studies. The Astronomical Society (formally Mathematical and Astronomical Society) established in 1959 is one of the oldest societies in the Colombo University and almost all Sri Lankan astronomers working in NASA and several other observatories around the world were the members of this society. We use the Department's 28 cm reflector telescopes and our training programmes are conducted mostly in the astronomical observatory dome situated in the University paly ground. Inside the dome has the more than 100 years old University of Colombo Moleswith telescope (needs a separate fund to repair it). The telescope was originally owned by Major P. B. Molesworth, born in Colombo, Sri Lanka in 1897 and made his astronomical observations in Trincomalee. He was considered as the finest amateur planetary observer alive in the world during the decade 1896-1905. A crater about 16 km in diameter on the southern hemisphere of Mars (211° W, 28° S) has been named after him. The telescope goes to the history book of the world astronomy due to another finding - the Jupiter's great South Tropical Disturbance (1901-1939), a complex dusky region in the planet's South Tropical Zone, was first recorded by Major P. B. Molesworth on 1901 February 28 using this telescope when it was housed in Trincomalee observatory in Sri Lanka. By far, this telescope and more than half century old Mathematical and Astronomical Society of the University of Colombo (former Astronomical Association of the University of Ceylon) affiliated to it has been the kindergarten to more than dozen world renowned astronomers immerged from Sri Lanka.

In the recent past more than ten astronomy related special degree undergraduate projects have been completed and many are in collaboration with the Arthur C Clarke Institute for Modern Technologies, in Katubedda, Moratuwa. More recently we have started Astronomy, Astrophysics and Space science postgraduate degree (MPhil and PhD) programmes in collaboration with the universities of Utha, USA (in the field of High Energy Astrophysics), Pennsylvania State University (in the field of Dark Matter and Gravitational Lensing), Astronomy and Astrophysics Division, Physics Research Laboratory, Ahmedabad, India (in the field of Observational Astronomy-Spectroscopy). On March 29, 2016 a team of Scientists headed by Dr. Akimasa Yoshikawa of Kyushu University Japan visited the Department of Physics, University of Colombo and establish a Rs 5 million worth Magnetic Field Measuring station in Sri Lanka highlighting Sri Lanka as the 28th country to join the MAGDAS9 UN funded project on investigating the influence of solar activity on earth and nearby environment (Space science and Space Weather international project). Signing an MOU between the universities of Kyushu Japan and Colombo, Sri Lanka is in the pipeline to continue this research collaboration and a NRC grant was received for the same.

The unit will cater to uplift the level of students, teachers, and scientists with a flare for astronomy in Sri Lanka. Research carried on within the unit will mainly guide towards astronomy, astrophysics and space science. Public outreach programmes such as astronomical night observational camps at school level and district level, helping to conduct Sri Lankan Astronomy and Astrophysics Olympiad and the Sri Lankan Junior Astronomy Olympiad jointly with the Institute of Physics, Sri Lanka and the Sri Lankan Astronomy Olympiad Association are envisaged. We are also currently conducting the teacher training programme for the National Institute of Education (NIE) annually.

The activities conducted by us and the demand for astronomy in the country are very high that we propose the establishment of a unit under the Department of Physics University Colombo to provide more service to the nation and for better coordination of respective activates with special attention to astronomy education, research and popularization.

3.2 Objectives

- Support astronomy related education programs for undergraduate and postgraduate students at University of Colombo and other Universities in Sri Lanka (Special degree programs, diploma, masters and PhD programmes).
- Conduct training programs for academics, researchers, school teachers, technicians and students to carry out astronomy related activities.
- Conduct research programs in Sri Lanka at international level in the fields of Astronomy, Astrophysics and Space Science and produce publications with special attention to indexed journal publications.
- Increase the general knowledge on astronomy of all university students in the Colombo University by strengthen the Astronomical Society of the Department of Physics.
- Conduct public awareness programmes on night sky and special celestial events like eclipses, visible comets, potentially hazard asteroids.
- Organize activities to popularize astronomy among the school children and general public.
- Provide expertise support to other local universities and institutes like Sri Lanka Planetarium,
 Arthur C Clarke Institute for Modern Technologies whenever requested to develop their activities in the field of Astronomy and Space Science.
- Support national level activities such as Astronomy Olympiad.
- Setting up of a well-equipped observatory/laboratory with computers, telescopes, CCD cameras, spectrographs, photometers with other supporting equipment, demonstration set-ups and audiovisual facilities to carry out Astronomy education training, night sky observations and research.
- Develop a mechanism to provide the technical support to schools and other national bodies possessing telescopes and other astronomy related equipment on service and maintenance.
- Establish international collaborative research links with other research groups/ professionals working in the field of Astronomy, Astrophysics and Space Science.
- Organizing International/Regional Workshops/Seminars in Sri Lanka in the field(s) of Astronomy, Astrophysics and Space Science.

3.3 Existing Collaborative Research Links

A. International

- I. Dr. Sashikaran Ganesh, Astronomy and Astrophysics Division, Physical Research Laboratory, Ahmedabad, INDIA.
- II. Dr. Akimasa Yoshikawa, Space and Earth Electromagnetism Laboratory, Department of Earth and Planetary Sciences, Graduate School of Sciences, Kyushu University, Hakozaki, JAPAN.
- III. Dr. A. U. Abeysekara (High Energy Astrophysics), Department of Physics & Astronomy, The University of Utah, USA.
- IV. Prof T. Wickramasinghe (Dark matter and Gravitational Lensing), Dept. of Physics, The College of New Jersey, USA.

- V. Prof. (Mrs). B. Veenadhari, Observatory and Data Analysis Division, Indian Institute of Geomagnetism, Mumbai, INDIA.
- VI. Dr Aniket Sule, Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, INDIA.
- VII. Dr. Bhuwan Joshi, MountAbu Astronomical Observatory, Udaipur, INDIA.

B. Local

- I. Mr. Saraj Gunasekera, Head of the Division, Space Applications Division, Arthur C. Clarke Institute for Modern Technologies, Katubedda, Moratuwa, Sri Lanka.
- II. Prof. V P S Perera, The Head, Department of Physics, The Open University of Sri Lanka, Nawala, Nugegoda.
- III. Dr. G D K Mahanama, The Head, Department of Physics, University of Ruhuna, Matara.

3.4 Currently conducting postgraduate (MPhil & PhD) research programmes in this field

- I. K L I Gunawardhana- Study of Gamma-ray Emission from the BLAZAR 1ES 2200+420 (in collaboration with Department of Physics and Astronomy, The University of Utah-USA)
- II. K G C Weerasekera- Influence of Dark Energy on Gravitational Lensing (in collaboration with Department of Physics, The College of New Jersey, USA)
- III. Janaka Adassuriya-Mode identification of oscillations of Delta Scuti type Stars using multicolour photometry and high resolution spectroscopy (in collaboration with Physical Research laboratory, Ahmedabad, India).
- IV. Upali Jayasinghe- Space weather and geomagnetic electrodynamics (in collaboration with Department of Earth and Planetary Sciences, Kyushu University, Japan).
- V. Mahesh Vipul Youvan Hearth -A search for Extrasolar planets around M-type dwarf stars

4.0 The Astronomical Society of the Faculty of Science, University of Colombo

The Astronomical Society of the Faculty of Science, University of Colombo is the oldest astronomical society in Sri Lanka as well as the one and only astronomical society among Sri Lankan university history. Our society first named as the Mathematical and Astronomical Society and then partitioned to the Astronomical Society.

ESTRONOMICAL SOCIETY

UNIVERSITY OF COLOMBO

The eminent Sri Lankan astronomers Professor Chandra Wickramasinghe and Professor V.K. Samaranayake took the initiative in founding this society back in 1959, playing the roles of very first president and the secretary. This move can be referred to as the first scientific collaboration towards astronomy in Sri Lanka. Further Professor .L.SR. Wijewardana and Professor Valentine Joseph were prominent members of the society and today Prof. Chandana Jayaratne serves as the senior advisor and the senior treasurer.

Our society owned the largest and the oldest telescope of South Asia till 1990's called Molesworth telescope. It was the first telescope which observed the Jupiter's red spot. Nowadays is not in operational level. Now we own two telescopes. One is Vixen; a refractor telescope and the other one is the Celesron next 130 SLT; a reflector telescope and a Newtonian telescope. The society conducts occasional observation camps, regular series of lectures and other astronomy activities both for university

undergraduates as well as school students upon request. It is our firm conviction that the school students should be made aware of knowledge for a concurrent progress of astronomy in Sri Lanka, which is the very fact behind many of the outreach projects organized by our society.

4.1 Our Contribution and Projects

We contribute to school level astronomy by offering both material and immaterial resources for 'Astronomy Days' and 'Science Days'. Further we've been continuing an inter school astronomy quiz competitions and workshops. 'Star Quest' is the one of the main program organized by our society.

The society conducts occasional observation camps, regular series of lectures and other astronomy activities both for university undergraduates as well as school students upon request. For the last quarter, we've invited for the night camps in Nikaweratiya, Ehaliyagoda and Agunakolapalassa, Galle and we've organized some camps at university premises too. It is our firm conviction that the school students should be made aware of knowledge for a concurrent progress of astronomy in Sri Lanka, which is the very fact behind many of the outreach projects organized by our society.

4.2 Some of the astronomy popularization/education activities

Some activities organized by the Astronomy and Space Science Unit of the Department of Physics alone/jointly with Astronomical Society University of Colombo are as follows. (Figure captions are on the top).

"Star Quest" All Island Astronomy quiz competition conducted by Astrosoc, University of Colombo.(An annual event)





Night Sky Observation Camps

Nikaweratiya



Agunakolapalassa



Ehaliyagoda



Colombo University Grounds Astro Night(L) and Maharagama NIE Teachers' Training Programme(R)



Ratnapura(Left), Buttala University(Middle) & Colombo University Astronomy Course Students(R)



Venus Transit- Colombo University and Trincomalee simultaneous live webcast



Puttalum and Amparei Astro Days



Ratnapura(Left), Buttala University(Middle) & Colombo University Astronomy Course Students(R)



Conducting the Sri Lankan Olympiad on Astronomy and Astrophysics and for Grades 10-13 students and Sri Lankan Junior Astronomy Olympiad for Grades 6-9 students since 2007 under the patronage of the Institute of Physics, Sri Lanka.





An Olympiad Award Ceremony







Training of the national team at Colombo University for International Astronomy Olympiad (IAO) and International Olympiad on Astronomy and Astrophysics(IOAA) before their departure to International competition



National Astronomy Olympiad Teams at International Astronomy Olympiads









Annual General Meeting of the Astrosoc



5.0 The proposed telescopes

The following are the links of telescopes that are proposed.

Option-1

https://www.amazon.com/Meade-Instruments-0-5PST-Coronado-Telescope/dp/B002UPYMCA

Option-2

https://www.amazon.com/Celestron-StarBright-Schmidt-Cassegrain-2800mm-Telescope/dp/B000ARFND2/ref=pd_sbs_421_1?_encoding=UTF8&psc=1&refRID=NCZQ3G0MTD1VQKM5NTQ_D_

5.1 OPTION 1







Meade Instruments 606001 Power Supply LXPS7 (Grey) 会全会会 13 \$79.59



Meade Instruments #126 1.25-Inch 2x Short-Focus Barlow Lens 全量量量 36 \$29.95 \(\text{prime} \)

Meade

Meade Instruments LX90-ACF 12-Inch (f/10) Advanced Coma-Free Telescope (1210-90-03)

★★★★ * 26 customer reviews | 17 answered questions

Price: \$2,899.00 & FREE Shipping

Only 5 left in stock - order soon.

This item does not ship to **China**. Please check other sellers who may ship internationally. Ships from and sold by Focus Camera. Gift-wrap available.

Size: 12-Inch

- 12" f/10 Advanced Coma-Free Optics
- 3048mm focal length
- Ultra-High Transmission Coatings (UHTC)
- Standard Field Tripod
- AudioStar handbox with speaker and Astronomer Inside

New (3) from \$2,899.00 & FREE shipping.





Meade Instruments 607001 Series 4000 1.25-Inch Eyepiece and Filter Set (Black)

\$ 148 88 prime
FREE Shipping on eligible orders

食食食食食 1 + 9

More Buying Choices \$148.88 (12 used & new offers)

Frequently bought together



- i These items are shipped from and sold by different sellers. Show details
- ☑ This item: Orion 53082 StarShoot G3 Deep Space Color Imaging Camera \$349.99
- ✓ Orion 0.5x Focal Reducer for StarShoot G3 Imaging Cameras \$39.99
- ✓ Celestron 18778 AC Adapter (Black) \$21.49



ORION

Orion SkyQuest XX12 Light Shroud and Glass Solar Filter Kit

★★☆☆☆ ▼ 1 customer review

Price: \$209.99 + \$9.95 shipping

In stock on October 31, 2017.

Order it now.

This item does not ship to **China**. Please check other sellers who may ship internationally. Ships from and sold by Orion Telescopes & Binoculars.

- Value-packed kit includes two vital accessories for safe daytime observation of the Sun with an XX12 telescope
- Kit includes both a Light Shroud and off-axis solar filter designed to fit the XX12 Truss Tube Dobsonian
- Included Light Shroud made of opaque black, stretch nylon fits the 12" Truss Tube reflector like a glove and fastens with elastic on both ends to block peripheral sunlight
- Included solar filter safely covers entire telescope aperture and features a 4" off-axis glass filter for safe solar views
- Discover the fun of daytime astronomy with your XX12 telescope and this affordable kit!

Frequently bought together



Total price: \$212.46

Add all three to Cart

Add all three to List

- i One of these items ships sooner than the other. Show details
- ✓ This item: Meade Instruments STELLA Wi-Fi Adapter (608003) \$169.95
- Meade Instruments 07505 No.505 Cable Connector Set for No.497 AutoStar and AudioStar Equipped Models... \$13.95
- ✓ Meade Instruments 07363 No.64 SLR Camera T-Adapter for Select ETX Models (Black) \$28.56



Meade Instruments LS 3.5 Inch Color LCD Video Monitor by Meade \$67.46 (9 new offers)



Meade #612 Dew Shield Compatible Flexible Dew Shield for Meade 12 inches LX200 or LX200GPS Telescopes by ATOZstars

\$49.00 (1 new offer)

★★★★☆ ▼ 3



Meade Instruments STELLA Wi-Fi Adapter (608003) by Meade \$169⁹⁵ vprime FREE Shipping on eligible orders

More Buying Choices \$169.95 (6 new offers)

☆☆☆☆☆ ▼2

Estimated budget (without tax- it is also possible to try a local sponsor to pay any tax in Sri Lanka)

Item list made in priority order (Items 1-17 are extremely important)

No.	Item	Qua	Price: USD
		ntity	(\$)
1	Meade Instruments LX90-ACF 12-Inch (f/10) Advanced Coma-Free	1	2,899.00
	Telescope (1210-90-03)		
3	Meade Instruments 607001 Series 4000 1.25-Inch Eyepiece and	1	148.88
	Filter Set (Black)		
4	Meade Instruments 07584 Universal AC Adapter for EXT-90 and	2	69.90
	Newer Telescopes (Black) 2x USD 34.95		
5	Meade Instruments 606001 Power Supply LXPS7 (Grey)	1	79.59
6	Meade Instruments #126 1.25-Inch 2x Short-Focus Barlow Lens		29.95
7	Celestron Aux Port Splitter by Celestron 2x\$20.68	2	41.36
8	Meade Instruments STELLA Wi-Fi Adapter (608003)	1	169.95
9	Meade Instruments 07505 No.505 Cable Connector Set for No.497		13.95
	AutoStar		
10	Meade Instruments 07363 No.64 SLR Camera T-Adapter for Select		
	ETX Models (Black)		28.56
11	Orion SkyQuest XX12 Light Shroud and Glass Solar Filter Kit	1	209.99
12	Orion 53082 StarShoot G3 Deep Space Color Imaging Camera by	1	349.99

	ORION		
13	Orion 0.5x Focal Reducer for StarShoot G3 Imaging Cameras by	1	39.99
	ORION		
14	Meade Instruments LS 3.5 Inch Color LCD Video Monitor	1	67.46
15	Solomark 1.25 to 2 Inch Telescope Eyepiece Adapter by	1	12.99
	SOLOMARK		
16	Solomark 2inch to 1.25 Inch Telescope Eyepiece Adapter by	1	18.99
	SOLOMARK		
17	Meade #612 Dew Shield Compatible Flexible Dew Shield for Meade		49.00
	12 inches LX200 or LX200GPS Telescopes		
18	Meade Instruments 607010 Series 4000 2-Inch Eyepiece and Filter	1	279.85
	Set (Black)		
19	6"x6" Solar Filter Sheet for Telescopes, Binoculars and Cameras	2	31.98
	2x15.99		
	TOTAL (22 items)		4541.38

5.2 OPTION 2

The details of the best Option (Meade 11 inch telescope) are as follows:



Celestron

Celestron CPC 1100 StarBright XLT GPS Schmidt-Cassegrain 2800mm Telescope with Tripod and Tube

★★★★ ▼ 57 customer reviews | 79 answered questions

Price: \$2,999.00

In Stock.

This item does not ship to **China**. Please check other sellers who may ship internationally. Learn more

Ships from and sold by Amazon.com.

Style: CPC 1100 GPS SCT

CPC 1100 GPS SCT \$2,999.00 CPC 800 GPS SCT \$1,989.00 CPC 925 GPS SCT \$2,499.00

- 11-inch diffraction limited Schmidt-Cassegrain telescope
- Fully computerized dual fork arm altazimuth mount
- Ergonomic design--Comfortably move the telescope from location to location
- Proven NexStar computer control technology; GPS alignment
- 280 mm aperture, 2800 mm focal length

Customers who bought this item also bought







Celestron Power Tank

☆☆☆☆☆ 262

\$60.59 ✓ prime



Celestron Eyepiece and Filter Kit – 14 Piece
Telescope Accessory Set
☆☆☆☆ 359
\$139.95 ✓ prime





Celestron 94305 Two-inch Eyepiece and Filter Kit ★★★★ 37 \$259.00 ✓ prime



Celestron StarSense Automatic Alignment Telescope Accessory, Black (94005) 全年 126 \$329.00 \prime



Celestron Aux Port Splitter

★★★★ 31

\$20.68 ✓ prime



Solomark 1.25 to 2 Inch Telescope Eyepiece Adapter 食食食食食 5

\$12.99 \prime



Celestron 94014 Lens Shade for Schmidt-Cassegrains (11 ") ★★☆☆ 12 \$39.95 ✓ prime



Solomark 2inch to 1.25 Inch Telescope Eyepiece Adapter by SOLOMARK

\$18⁹⁹ prime
FREE Shipping on eligible orders
Only 20 left in stock - order soon.



Solarlite Filter for C-11 S/C Telescopes, Part #S12500. by Thousand Oaks Optical

§ 129⁰⁰ vprime

FREE Shipping on eligible orders
Only 1 left in stock - order soon.

★★★★★ ▼ 1

Frequently bought together



- $\it i$ These items are shipped from and sold by different sellers. Show details
- ☑ This item: Orion 53082 StarShoot G3 Deep Space Color Imaging Camera \$349.99
- ✓ Orion 0.5x Focal Reducer for StarShoot G3 Imaging Cameras \$39.99
- ✓ Celestron 18778 AC Adapter (Black) \$21.49

Frequently bought with *Dew Not 11" Dew Heater Strip DN012*



Estimated budget (without tax- it is also possible to try a local sponsor to pay any tax in Sri Lanka)

Item list made in priority order (Items 1-13 are extremely important)

No.	Item	Qua	Price: USD
		ntity	(\$)
1	Celestron CPC 1100 StarBright XLT GPS Schmidt-Cassegrain	1	2,999.00
	2800mm Telescope with Tripod and Tube by Celestron		
2	Celestron 94014 Lens Shade for Schmidt-Cassegrains (11 ") by	1	39.95
	Celestron		
3	Celestron Eyepiece and Filter Kit – 14 Piece Telescope Accessory	1	139.95
	Set by Celestron		
4	Celestron 18778 AC Adapter (Black) by Celestron 2x \$21.49	2	42.98
5	Celestron Aux Port Splitter by Celestron 2x\$20.68	2	41.36
6	Celestron 93973 Skyportal Wifi Module, Black by Celestron	1	89.95
7	Celestron Power Tank by Celestron	1	60.59
8	Orion 53082 StarShoot G3 Deep Space Color Imaging Camera by	1	349.99
	ORION		
9	Orion 0.5x Focal Reducer for StarShoot G3 Imaging Cameras by	1	39.99
	ORION		
10	Celestron StarSense Automatic Alignment Telescope Accessory,	1	329.00
	Black (94005) by Celestron		
11	Solomark 1.25 to 2 Inch Telescope Eyepiece Adapter by	1	12.99
	SOLOMARK		
12	Solomark 2inch to 1.25 Inch Telescope Eyepiece Adapter by	1	18.99
	SOLOMARK		
13	Thousand Oaks Optical Solarlite Filter for C-11 S/C Telescopes, Part		129.00
	#S12500		
14	Celestron 94305 Two-inch Eyepiece and Filter Kit by Celestron	1	259.00
15	Dew Not 11" Dew Heater Strip DN012	1	66.75
16	Thousand Oaks Four-Channel Digital Dew Heater Control Unit -	1	113.00
	Requires Heater Band/s. by Thousand Oaks Optical		
	TOTAL (18 items)		4,732.49

6.0 Our Recommendation

We recommend the Option -1 Meade Instruments LX90-ACF 12-Inch (f/10) Advanced Coma-Free telescope as it is 12- inch diameter(and lowest price too – USD 4541.38) compared to the Option-2 (Celestron CPC 1100 StarBright XLT GPS Schmidt-Cassegrain 2800mm Telescope, Price USD 4,732.49), which is only 11-inch diameter.

This recommendation was also based on the comments and suggestions made by Dr. Nalin Samrasinghe after reviewing the specifications of the two telescopes. Extracts of Dr Nalin's email says "Can it track essentially at any non-sidereal rate? Meade model specifically says they do it but appears that the Celestron listed can only do solar and lunar rates (other than the sidereal). This could be a problem if you are going to image solar system objects. I think the imaging capability with relevant tracking rates should be there for both solar system and deep sky objects based on your goals."

However, we have no objection for any decision taken by the CUFSAA in selecting either Option1(Meade 12"telescope) or Option-2 (Celestron 11" telescope) or reducing the accessories mentioned in the order lists (amazon.com)arranged in priority order, based on the availability of funds.

Report Prepared by

2017.10.28

Prof. K P S Chandana Jayaratne Director, Astronomy and Space Science Unit Department of Physics, University of Colombo and Senior Treasurer and Advisor of the Astronomical Society, University of Colombo

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