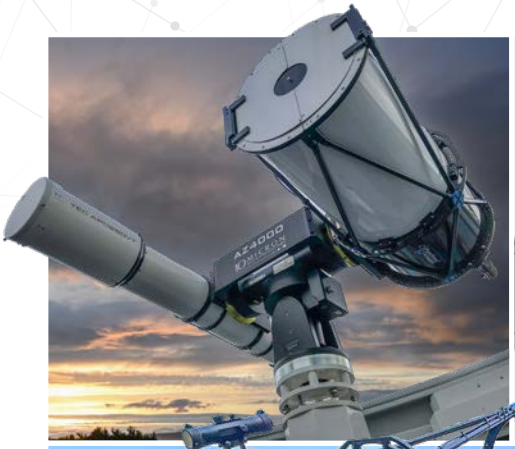
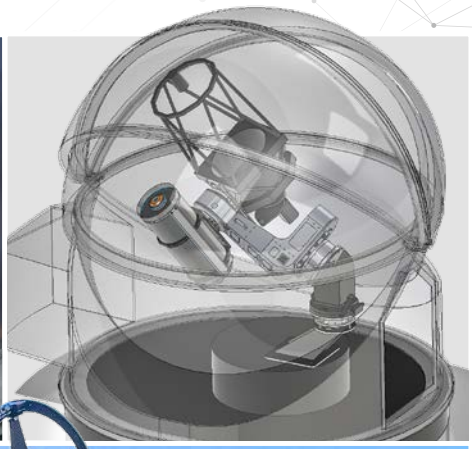
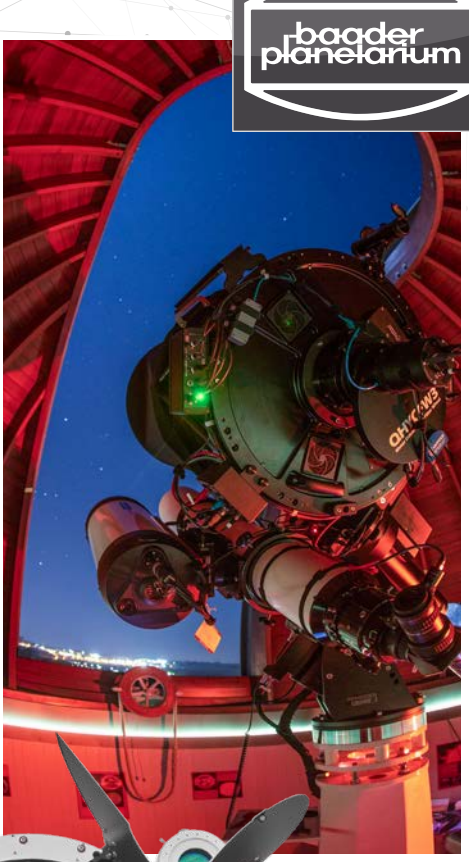
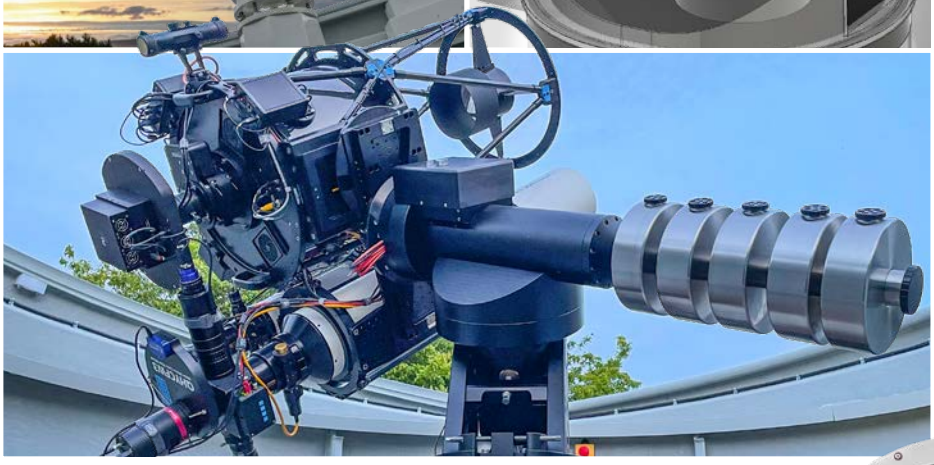








MAXIMUM FLEXIBILITY:

PARALLEL TELESCOPE INSTALLATION

Mounting two or more telescopes on a single mount or gimbal offers a flexible way to capture wide-field and high-resolution views simultaneously. Whether for imaging, spectroscopy, or research, parallel setups enable efficient data collection and broaden the scope of every observation session.

EN ver. 03/2025

INTRODUCTION / USECASE

Mounting two (or more) telescopes in parallel on a single mount opens up a wide range of applications, yet also poses special requirements in terms of planning and execution. The primary aim is to operate multiple instruments at the same time safely and with stability, without compromising optical performance, tracking accuracy, or mechanical precision.

Why parallel mounting?

For one, you can combine a main telescope with a smaller guide scope for high-precision astrophotography. You can also use different optical designs simultaneously—for example, an SC telescope for high-resolution planetary imaging while a refractor provides wide-field views. In addition, multiple spectrographs or cameras can be employed in parallel, for instance to collect scientific data in different wavelength ranges. Another possibility is so-called “laser communication,” where a telescope (as the receiver) and a laser (as the transmitter) are mounted on the same mount and require precise mutual alignment. In all these scenarios, however, a higher overall weight and more complex balancing on the mount must be taken into account.

Mechanical stability and load capacity

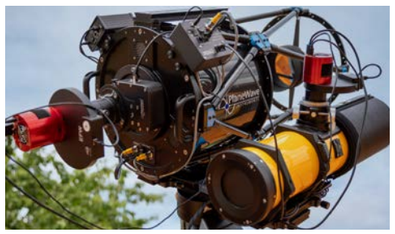
Arguably the most crucial aspect when planning a parallel setup is ensuring the mount can support the combined weight. The system must handle the weight of the telescopes and all accessories (eyepieces, cameras, filter wheels, etc.) while remaining stable. Undersized mounts often perform less accurately and are more sensitive to even slight vibrations, leading to poorer tracking accuracy and image quality. Appropriate counterweights and robust clamps and connecting elements are essential to prevent unwanted flexure or oscillation. Equally important is the actual “dual mounting” hardware. For this reason, all of our dual mounting components are made from high-strength aluminum alloys that offer very high rigidity and do not bend when the telescope’s orientation changes, unlike inferior aluminum.

Alignment and balance

To maintain the most accurate tracking, a precise and stable alignment of both telescopes and a well-distributed load are vital. Even slight misalignments can cause drift or uneven stress on the mount’s axes. Therefore, the mounting plate must be installed correctly, and in most cases, accessories such as a PAN-Adjuster (for reflectors) or guide rings (for refractors) are used to achieve the best possible alignment. For optimal results, the balance should be adjustable by shifting the instrument’s center of gravity with double mounting plates or adjustable tube rings, as well as using balancing weights for fine-tuning (see accessories on page 18).

Flexibility in observation

Parallel-mounted telescopes make it easier to switch quickly between different focal lengths or observational instruments. Whether you want to scan wide regions of the night sky or study details of specific objects, having two (or more) optics on one mount lets you change camera or optical configurations without cumbersome equipment swaps. This greatly increases efficiency, for example by allowing you to conduct both wide-field and high-resolution imaging simultaneously during an astrophotography session, or to run a spectrograph in parallel with a standard camera. If you want to get even more out of each instrument, we recommend using our Instrument Multiport IMP85 (see accessories on page 18). In professional or semi-professional environments, such as public observatories or research institutions, this flexibility is particularly advantageous.



Options for parallel mounting multiple telescopes

To accommodate main instruments of different sizes, two double mounting plates are available: a 570 mm plate for telescopes up to 17" and a 750 mm plate for larger systems in the 20" to 24" range. These plates make it possible to securely attach one or more auxiliary instruments (e.g. guide scopes, smaller refractors, or fast astrographs) alongside the main telescope.

Some modern alt-azimuth mounts—such as the 10Micron AZ series or the PlaneWave L series—are already designed from the outset to hold two optical tubes simultaneously. If needed, you can also add a dual mounting plate to accommodate even more instruments in parallel. This can be especially beneficial for professional facilities or larger observatories where multiple telescopes of different designs are used at the same time.

Conclusion and outlook

Parallel-mounted telescopes require careful planning regarding the mount’s capacity, mechanical stability, and precise alignment options. When these prerequisites are met, you will benefit from a highly versatile system suitable for visual observation, astrophotography, or spectroscopy alike. In particular, combining stable dual mounting plates with modern (in some cases Direct-Drive-based) mounts significantly expands the possibilities.

On the following pages, you will find overview graphics and concrete examples of various configurations as well as the respective Baader products used. You will see how different telescopes—from classic SCTs and refractors to larger CDK systems—can be mounted side by side, and which components have proven themselves in practical use.

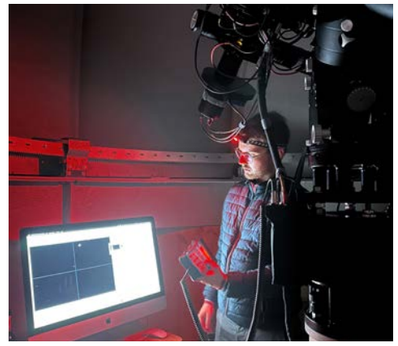


TABLE OF CONTENTS

OVERVIEW: PARALLEL TELESCOPES ON

GERMAN EQUATORIAL MOUNTS

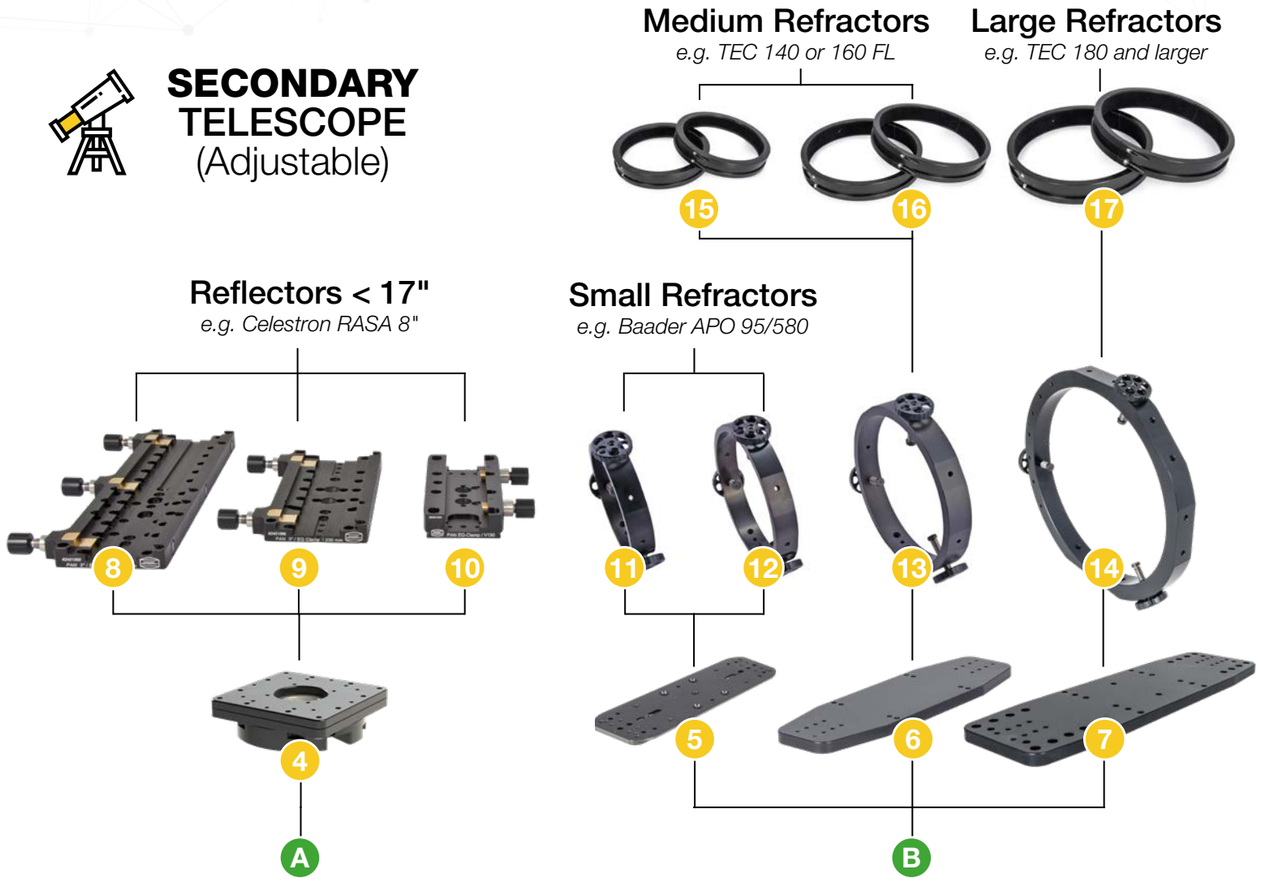
SECONDARY TELESCOPE (Adjustable)

Medium Refractors
e.g. TEC 140 or 160 FL

Large Refractors
e.g. TEC 180 and larger

Reflectors < 17"
e.g. Celestron RASA 8"

Small Refractors
e.g. Baader APO 95/580

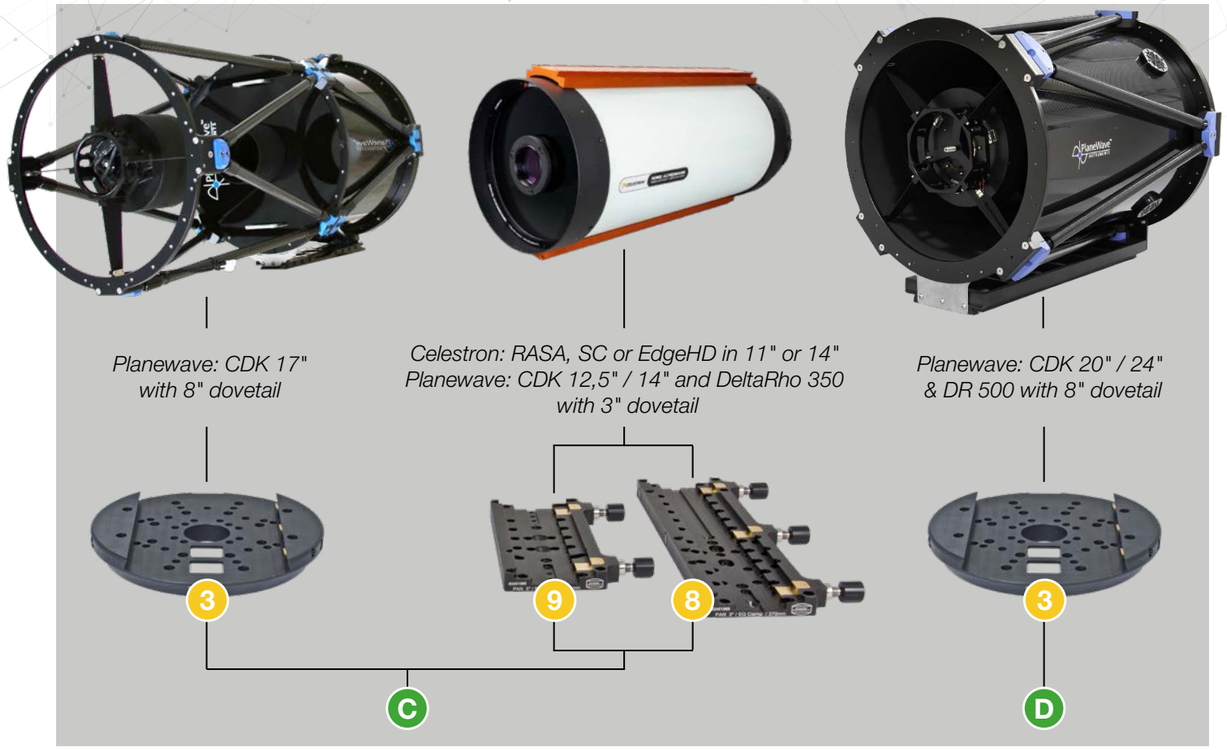


1 #2451559 8" double mounting plate – 570 mm
2 #2451561 8" double mounting plate – 750 mm
3 #2451555 8" PlaneWave Clamp
4 #2451515 PAN-Adjuster – up to 40kg payload
5 #1500330 Base plate for GS I+II rings – 300 mm
6 #1500340 Base plate for GS III rings – 400 mm
7 #1500341 Base plate for GS IV rings – 500 mm
8 #2451565 3" PAN / EQ clamp – 370 mm
9 #2451566 3" PAN / EQ clamp – 230 mm
10 #2451525 PAN / EQ clamp – 190 mm
11 #1500201 Guidescope Rings BP I – 60-120 mm
12 #1500202 Guidescope Rings BP II – 110-160 mm
13 #1500203 Guidescope Rings BP III – 140-185 mm
14 #1500204 Guidescope Rings BP IV – 175-265 mm
15 #1500500 GS Inner Ring Set for TEC 140 FL
16 #1500501 GS Inner Ring Set for TEC 160 FL
17 #1500510 GS Inner Ring Set for Large Refractors
(custom produced for your requirements, see p. 14)

A **Auxilary Reflectors**, adjustable to the fixed main telescope by Baader PAN-Adjuster 4
B **Auxilary Refractors**, adjustable to the main optics by guidescope rings 11, 12, 13, or 14

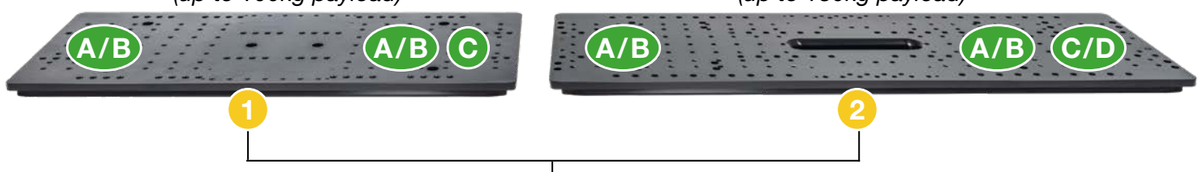
C **Main Telescopes up to 17"**, can be installed on both double mounting plates 1 and 2
D **Main Telescopes from 20" - 24"**, can be installed only on the 750mm double mounting plate 2

MAIN TELESCOPE (Fixed Position)



8" Plate 570mm for tube sizes ≤ 17"
(up to 100kg payload)

8" Plate 750mm for tube sizes > 17"
(up to 150kg payload)



Various leveling weights (single and sets) available
see page 18

OVERVIEW: PARALLEL TELESCOPES ON

AZIMUTHAL MOUNTS

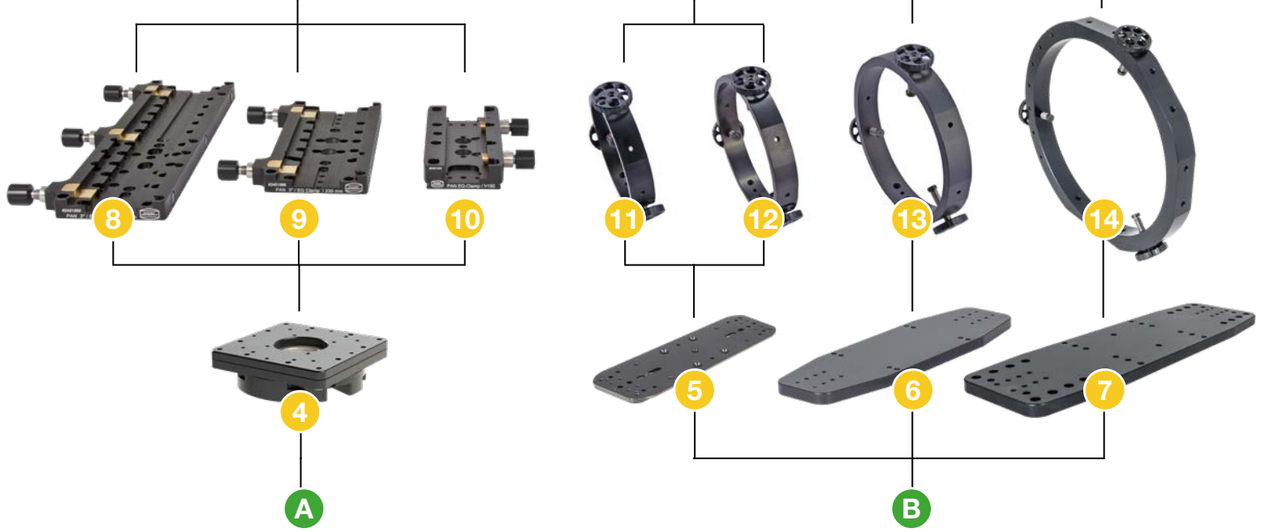
SECONDARY TELESCOPE (Adjustable)

Reflectors < 17"
e.g. Celestron RASA 8"

Small Refractors
e.g. Baader APO 95/580

Medium Refractors
e.g. TEC 140 or 160 FL

Large Refractors
e.g. TEC 180 and larger



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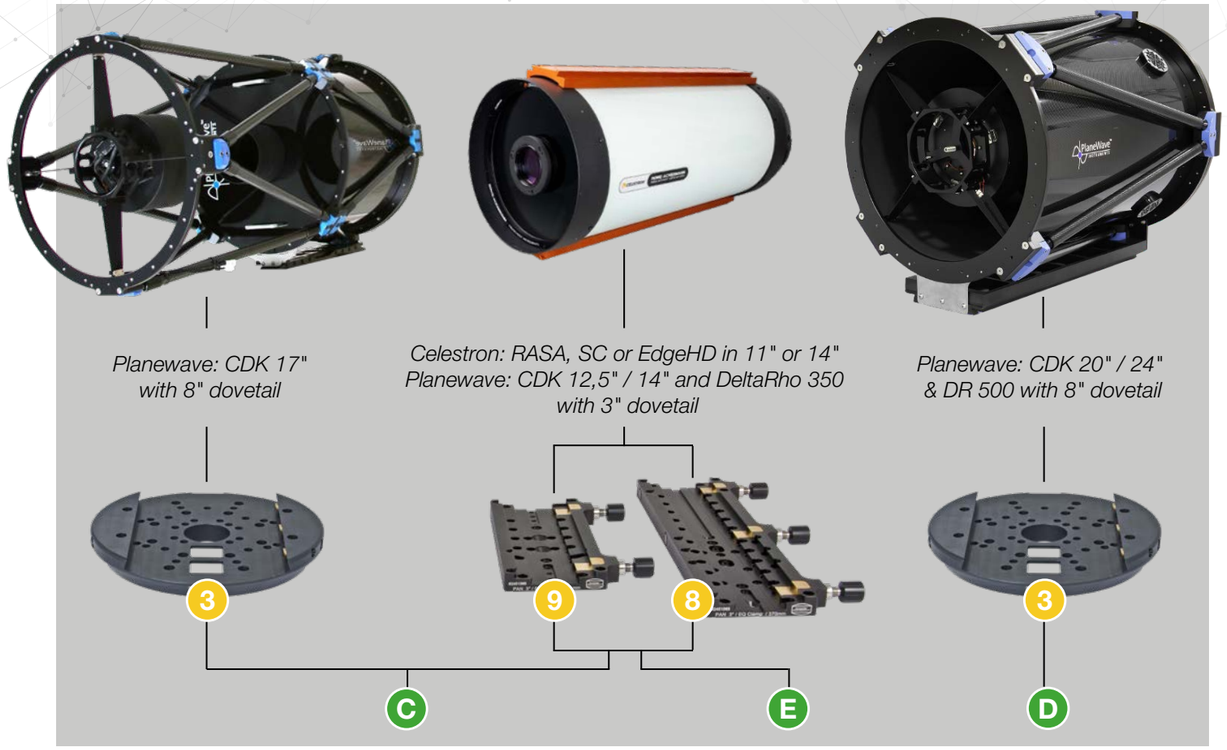
15 #1500500 GS Inner Ring Set for TEC 140 FL
16 #1500501 GS Inner Ring Set for TEC 160 FL
17 #1500510 GS Inner Ring Set for Large Refractors
18 #2451516 Adapter for PAN-Adjuster on L-350
19 #1453545 Adapter for 3" clamps on AZ3000
20 #1454545 Adapter for 3" clamps on AZ4000

A **Auxilary Reflectors**, adjustable to the fixed main telescope by Baader PAN-Adjuster 4
B **Auxilary Refractors**, adjustable to the main optics by guidescope rings 11, 12, 13, or 14.

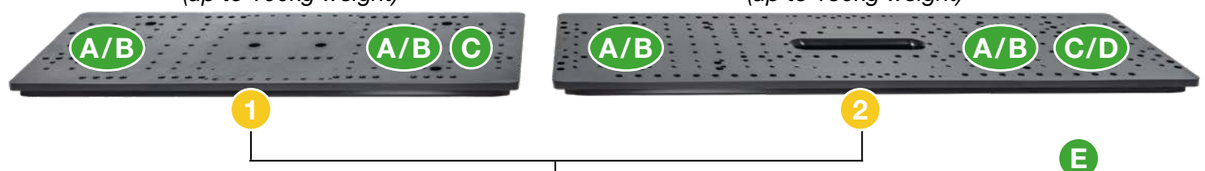
C **Main Telescopes** up to 17", can be installed on both double mounting plates 1 and 2.
D **Main Telescopes** from 20" - 24", can be installed only on the 750mm double mounting plate 2.

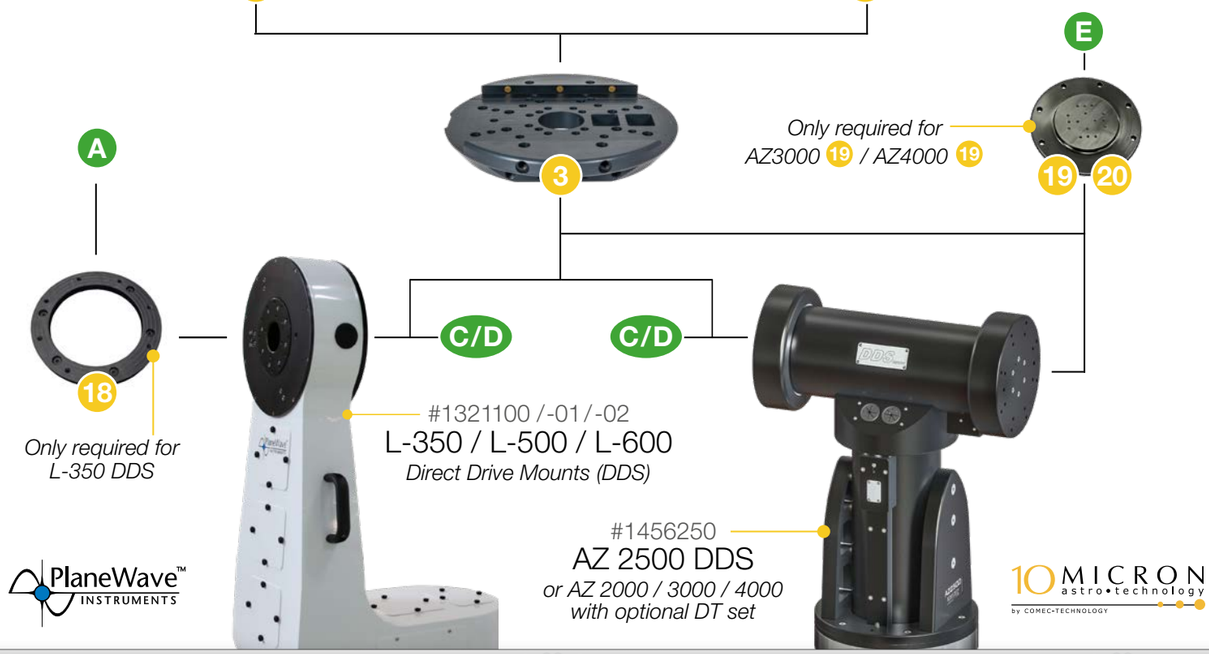
MAIN TELESCOPE (Fixed Position)



8" Plate 570mm for tube sizes ≤ 17"
(up to 100kg weight)

8" Plate 750mm for tube sizes > 17"
(up to 150kg weight)





PlaneWave™ INSTRUMENTS

10 MICRON astro•technology by COMEC•TECHNOLOGY

IN SPOTLIGHT:

PLANEWAVE OTA AND REFLECTORS

Primary PlaneWave™ Telescope

Secondary Telescope

with 3" / EQ dovetail, e.g. Celestron RASA 8"

For adjusting the optical axis of parallel mounted telescopes

For parallel mounting of two instruments, with a main optic of 17" or less tube diameter.

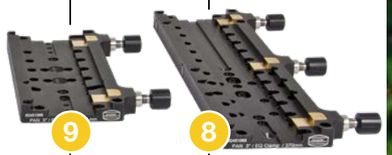
*Alternative plate for main optics **>17"**:*

#2451561
Heavy duty 8" double mounting plate 750 mm

CDK 17" with 8" dovetail

OR

CDK 12,5" (shown) / CDK 14" or DeltaRho 350 with 3" dovetail



Fits also onto PlaneWave L-Mount, 10Micron GM 2000, Paramount ME and ME II, AP 1200GTO and 1600GTO

#1453000 or #1454010
GM 3000 or
GM 4000 mount

10 MICRON astro•technology by COMEC-TECHNOLOGY

1 #2451559 8" double mounting plate – 570 mm
3 #2451555 8" PlaneWave Clamp
4 #2451515 PAN-Adjuster – up to 40kg payload
8 #2451565 3" PAN / EQ clamp – 370 mm
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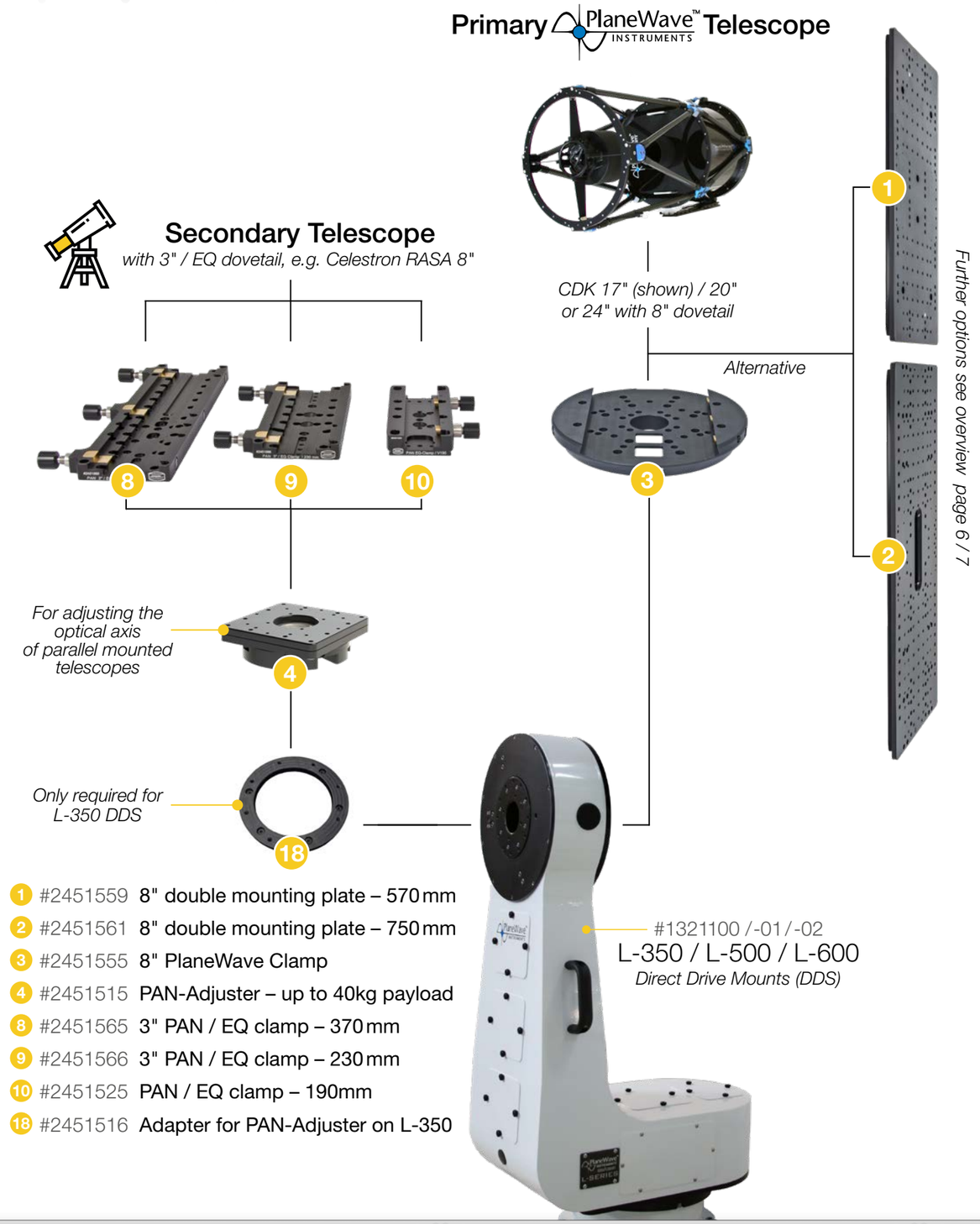
10 #2451525 PAN / EQ clamp – 190 mm

Institute	Stuttgart Observatory
Telescopes	PlaneWave CDK 17 and Takahashi Epsilon 180ED
Mount	10Micron GM 4000 HPS

IN SPOTLIGHT:

PLANEWAVE OTA & PRIME FOCUS



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10 #2451525 PAN / EQ clamp – 190mm
18 #2451516 Adapter for PAN-Adjuster on L-350

Institute	Sybilla Technologies
Telescopes	PlaneWave CDK 20 and Widefield Instrument
Mount	PlaneWave L-600 DDS

IN SPOTLIGHT:

CELESTRON OTA AND REFRACTORS

baader planetarium

Secondary Telescope

e.g. TEC 140 (shown) or 160 FL

For adjusting the optical axis of parallel mounted telescopes

For parallel mounting of two instruments, with a main optic of 17" or less tube diameter.

*Alternative plate for main optics **>17"**:*

#2451561

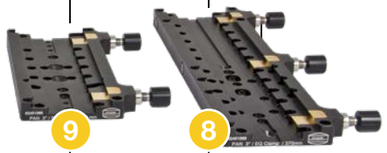
Heavy duty 8" double mounting plate 750 mm

Fits also onto PlaneWave L-Mount, 10Micron GM 2000, Paramount ME and ME II, AP 1200GTO and 1600GTO

- 1 #2451559 8" double mounting plate – 570 mm
- 3 #2451555 8" PlaneWave Clamp
- 6 #1500340 Base plate for GS III rings – 400 mm
- 8 #2451565 3" PAN / EQ clamp – 370 mm
- 9 #2451566 3" PAN / EQ clamp – 230 mm
- 13 #1500202 Guidescope Rings BP III
- 15 #1500500 GS Inner Ring Set for TEC 140 FL
- 16 #1500501 GS Inner Ring Set for TEC 160 FL

Primary CELESTRON Telescope

e.g. RASA (shown), SC or EdgeHD in 11" or 14"



#1453000 or #1454010

GM 3000 or GM 4000 mount

10 MICRON astro•technology by COMEC-TECHNOLOGY

Institute	Bernau Observatory
Telescopes	Celestron RASA 11" and TEC APO 140 FL
Mount	10Micron GM 3000 HPS

BAADER PLANETARIUM:

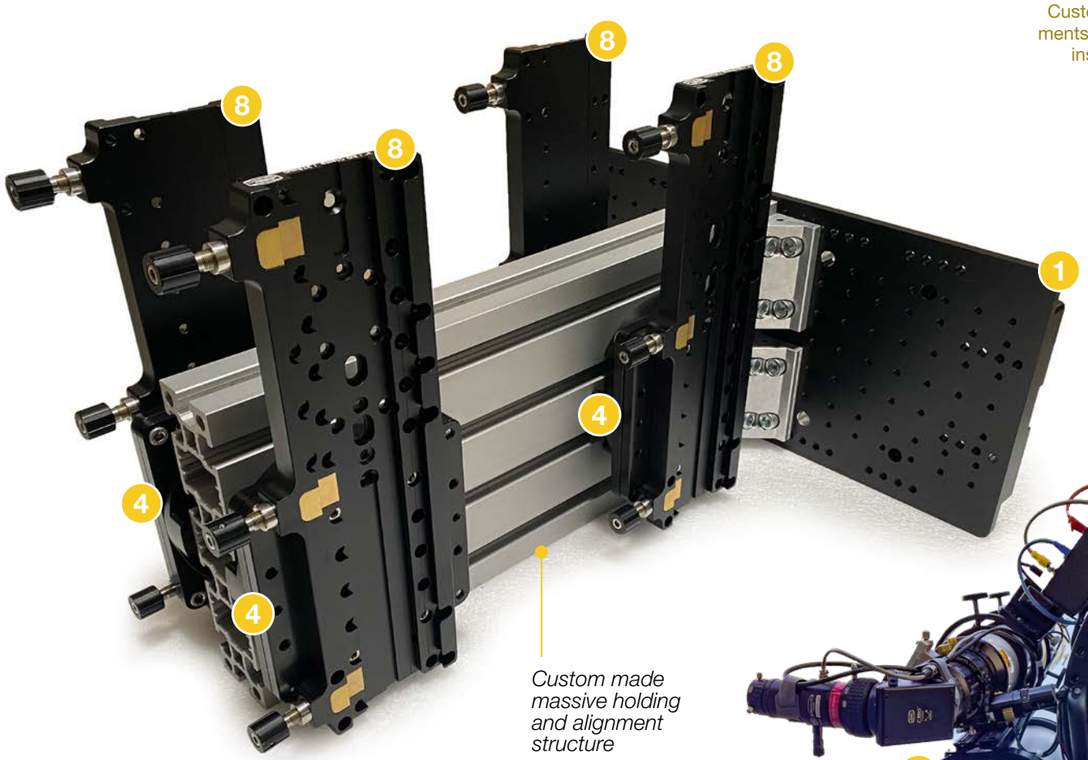
CUSTOM SOLUTIONS

Does your project have specific requirements that can't be met with COTS (Components off the Shelf) products? Then Baader Planetarium is your partner. Our engineers are here to bring your vision to life – just as we did with this unique installation of 16 Celestron 11" RASA f/2.2 astrographs on four PlaneWave L-550 DDS mounts. Each mount accommodates four telescopes, made possible through a custom holding and alignment structure that attaches to our 570 mm heavy-duty double mounting plate, along with additional Baader products shown below.

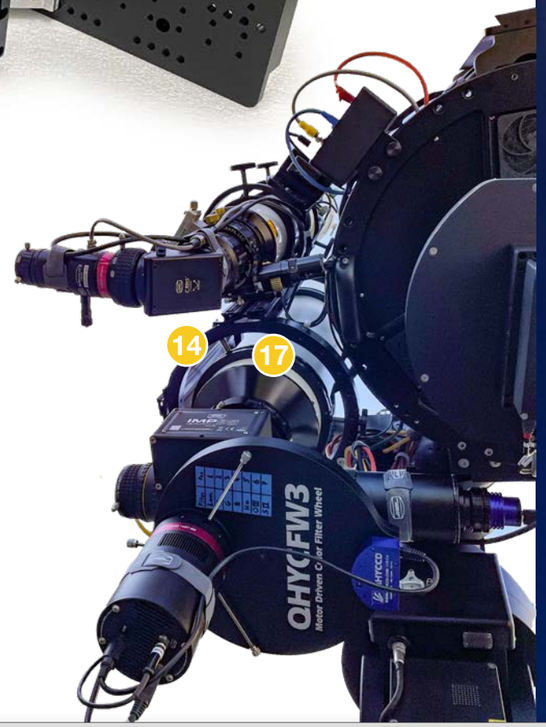
For other specialized needs – such as preventing flexure in sensitive optical tubes – we also fabricate custom inner rings for large refractors. These rings are tailored to the exact tube dimensions of each telescope when supplied in-house, ensuring a perfect fit and preserving precise collimation.

These examples are just the beginning. From advanced mechanical adaptations to specialized 3D-prints, we offer a wide range of custom solutions for complex telescope installations. If your project calls for something truly beyond standard offerings, our team stands ready to develop and manufacture the specialized hardware you need.

Custom Developments for telescope installations



Custom made massive holding and alignment structure



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8 #2451565 3" PAN / EQ clamp – 370mm
14 #1500204 Guidescope Rings BP IV – 175-265 mm
17 #1500510 GS Inner Ring Set for Large Refractors
(custom produced for your requirements)

Institute	IAC - ATLAS
Telescopes	16x Celestron 11" RASA f/2.2, mounted with custom solution
Mount	4x PlaneWave L-550

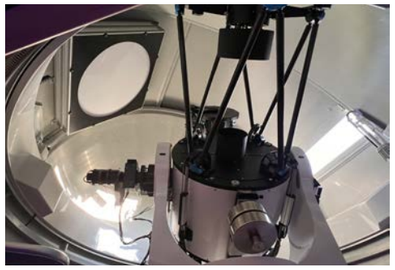
DO YOU NEED SUPPORT?

WE ARE YOUR PARTNER

Over the course of nearly 60 years, Baader Planetarium GmbH has carved out an exclusive position in the market by delivering top-quality products and taking a well-founded approach to each new project.

1. Selected High-End Instruments

We install only instruments in our observatories for which we have extensive integration and commissioning experience, or those we developed ourselves (domes), or where we played a key role in their development. In close collaboration with our long-standing partners PlaneWave Instruments, 10Micron, TEC, and Moravian, we maintain the highest standards of quality through continuous exchange. Each device undergoes extensive in-house testing before being installed at its final destination.



2. Professional Planning

Before planning an observatory, we hold in-depth discussions with the customer and, if necessary, their architect and structural engineer. We analyze plans, determine the optimal location, and apply knowledge gained from hundreds of projects to ensure the observatory and the building beneath it are ideally designed. Our CAD experts create detailed drawings of every major equipment configuration and check its spatial compatibility with our domes or any existing protective structure, guaranteeing smooth installation and reliable functionality.

3. In-House Workshops

Unlike simple resellers, we have the technical expertise and resources as a manufacturer to adapt, modify, and repair telescopes, mounts, cameras, and any kind of optical, electronic, or mechanical accessories. Our experienced opticians, electronics specialists, and mechanics have access to a wide range of machinery, tools, and a large inventory of spare parts—including those for older equipment. From aluminum welding to CNC milling to oil-spacing a telescope lens, we are familiar with all the tasks required to maintain or repair domes, mounts, and telescopes. As a result, we are the only company authorized by Zeiss to service amateur telescopes.

4. Standardization of Networking / Control Technology

Drawing on many years of experience and extensive testing procedures, we have developed an IT system known as the “Observatory Management System (OMS)” for observatory control. This system uses carefully selected, high-quality components – covering everything from cables and connectors to switches and hubs, as well as power supplies and computers – ensuring a long service life and high reliability. Individually manufactured cable harnesses for each setup further extend service life and reduce the risk of damage. We offer our OMS systems exclusively with our complete observatories, tailoring and integrating them to the customer’s requirements. Via remote access to OMS systems, we can provide optimal support at any time of day or night.

5. Complete Factory Integration

Before delivering a turn-key observatory or complex telescope system, we fully assemble the setup and test all components and functions under the real night sky. We also configure all software for the OMS to handle every device. Only once all features work flawlessly and all requirements are met do we partially disassemble and pack the components for transport to the installation site. This meticulous approach ensures that all parts fit together, function properly, and are fully accounted for. It prevents installation issues on-site and significantly shortens both the setup and commissioning periods. Even highly complex observatories can thus be installed and handed over fully operational within one or two days.

6. Most Experienced Installation Teams

The same staff members who configure, test, and pack the system in our facility also handle the final installation on-site. Our technicians have installed numerous systems around the world – from Europe to South America, Australia – over the past decades, overcoming a wide range of challenges and acquiring an intimate knowledge of the equipment. This unparalleled depth of experience sets us apart.

7. Long, Trouble-Free Operation

Our commitment to the highest quality standards results in an outstanding mean time between failures. Once our systems are commissioned, they typically run for very long periods without needing repairs or maintenance. Our domes generally require servicing or repairs no earlier than after 10 years of operation. Even our dome at the exposed Zugspitze summit (at nearly 3,000 m altitude, with wind speeds over 300 km/h) has needed only two minor service visits in 29 years. On Mount Skinakas in Crete, there are now an 8 m and a 5.3 m Baader slit dome, plus a 3.2 m slit dome dating back to 1986.

8. After Sales Support

Thanks to our dedicated project team, we are always ready to assist with any questions or issues that arise. With authorization, we can remotely access your system to conduct tests or make adjustments. Since some of our team members are experienced astrophotographers, we also offer exclusive workshops and training sessions. If desired, we can provide maintenance contracts to keep your installation in optimal condition over the long term.

9. Many Years of Experience

In the past five years alone, Baader Planetarium has regularly installed and successfully completed up to 15 complex observatory instruments and high-end turnkey observatories with domes annually, each with an average investment of over €300,000. The list of installed instruments speaks for itself. In addition, Baader Planetarium operates worldwide as a dome manufacturer and major telescope supplier.

THE PERFECT ADDITION

FURTHER USEFUL ACCESSORIES

#2451557

Intermediate Plate for 8" Double Mounting Plate

Allows easy raising and laterally variable displacement of clamps if the available space is too tight.

#2451300

Instrument Multi Port IMP85

Connect up to three instruments (e.g. cameras / eyepieces) at the focal plane of a telescope.

#2450310 S/B

Baader Stronghold Tangent Assembly

To fasten lightweight viewfinder or guiding telescopes and safely to your main telescope.

#2455055

Baader Cable Ties

Easy organisation of cables to avoid stress or damage caused by strain on cables and plugs.

Various Clamps

For quick and repeatable installation of different telescopes on one mount – from finderscopes to large telescopes.

#2451558

Baader Sidewing for 8" PlaneWave Clamp

Alternative option instead of double mounting plates, only recommended for certain specific applications.

Various 3" Dovetails

Heavy duty dovetails for quick installation of all kinds of telescopes and other accessories.

Various Leveling Weights

Various weights to perfectly balance all instruments on your mount.

Various Balancing Sets

For easier balancing of your telescope when changing accessories like heavy cameras.

A WEALTH OF INFORMATION

ADDITIONAL LINKS

www.baader-planetarium.com

Baader Planetarium Telescope Accessories

Everything for your telescope(s): (Motor) Focusers, dovetail bars, bags, covers and more ...

www.baader-planetarium.com

Baader Planetarium Mount Accessories

Everything for your mount(s): Pillars, tripods, adapter flanges, counter weights, power supplies ...

www.baader-planetarium.com

Baader Planetarium Optical Accessories

Everything for looking at the stars: Eyepieces, star diagonals, barlow lenses, reducers, bino-viewers...

www.planewave.eu

PlaneWave Telescopes

www.celestron.de

Celestron Telescopes

www.10micron.eu

10Micron Mounts

Customer	Hellas-Sky
Telescopes	PlaneWave DeltaRho 350 (2x) and Celestron RASA 36cm
Mount	10Micron GM 2000/3000 HPS

Institute	JMU University
Telescopes	Celestron C14 Edge HD and Celestron C11 Edge HD
Mount	Planewave L-350 DDS

Customer	Amateur Astronomer
Telescopes	PlaneWave CDK 17 and TEC APO 180 + TAK TSA 120
Mount	10Micron GM 4000 HPS

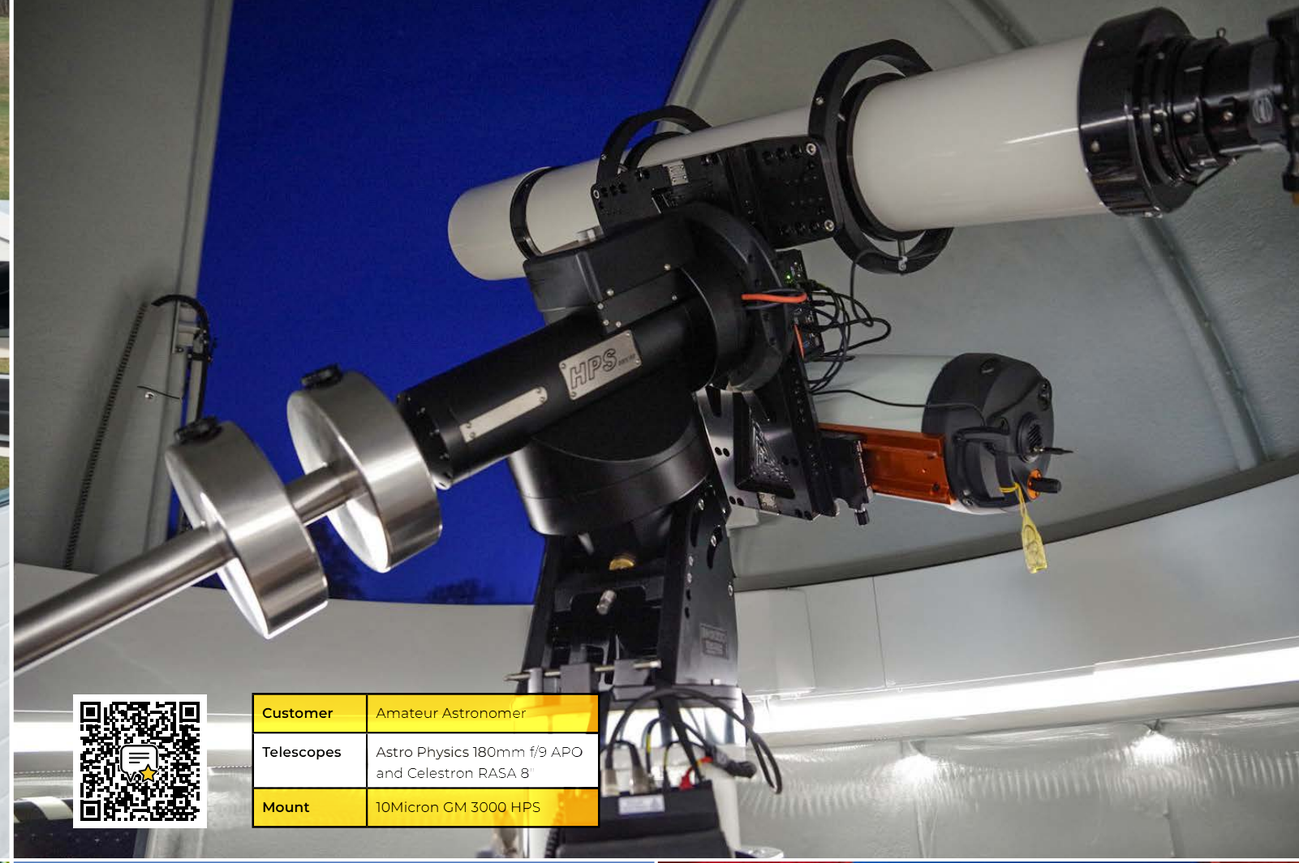
Institute	experimenta Science Center
Telescopes	TEC 250 Refractor and Planewave CDK 20
Mount	10Micron AZ 4000 HPS

Customer	Neumann Observatory
Telescopes	PlaneWave CDK 20 and TEC APO 160 f/7
Mount	10Micron GM 4000 HPS

Customer	Amateur Astronomer
Telescopes	Celestron C14 / RASA 11 / AP 5,6" APO / TAK 102FN
Mount	10Micron GM 3000 HPS

Customer	Amateur Astronomer
Telescopes	PlaneWave CDK 14 and TEC APO 140 FL
Mount	10Micron GM 2000 HPS

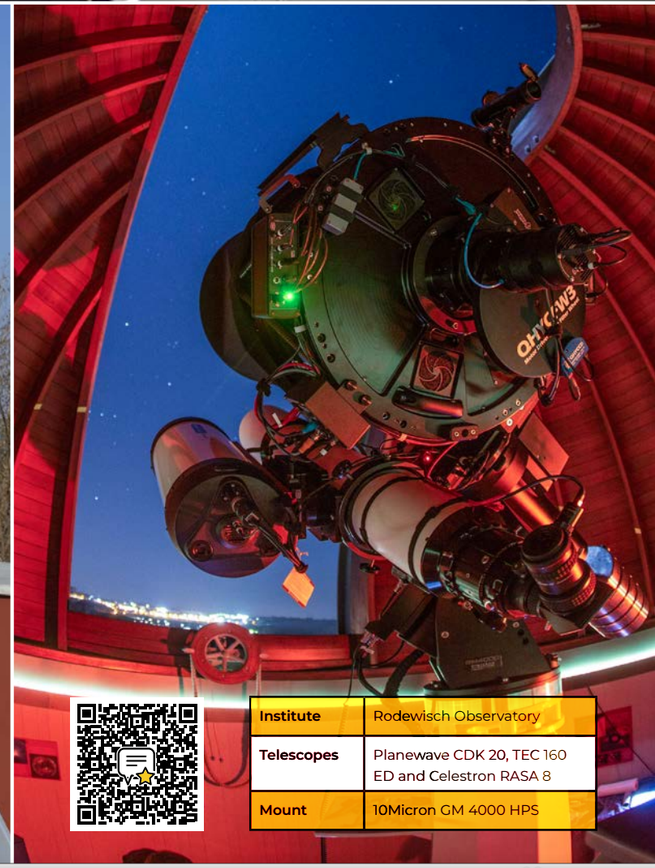
Customer	Amateur Astronomer
Telescopes	PlaneWave CDK17 and Celestron RASA 36
Mount	10Micron GM 3000 HPS



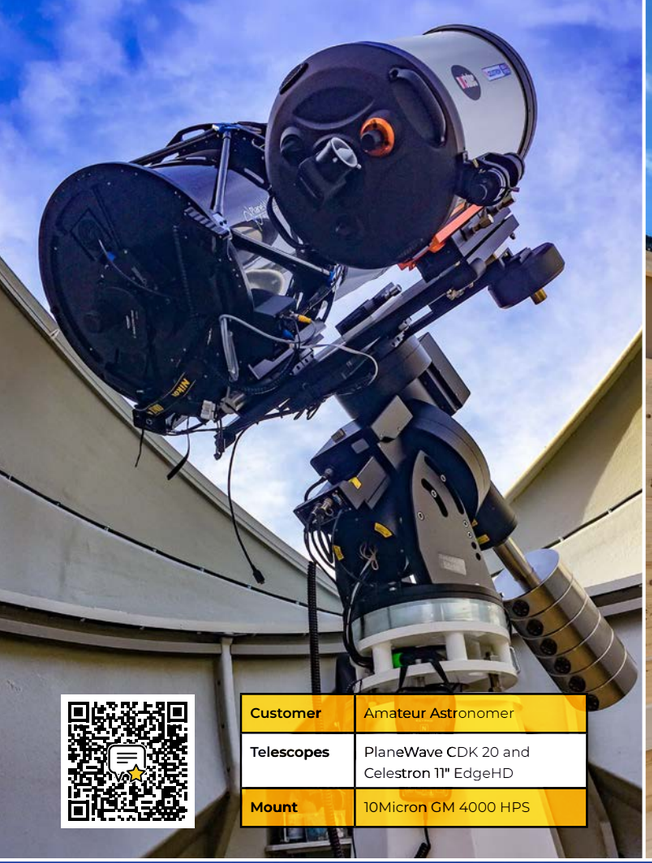
Customer	Amateur Astronomer
Telescopes	Astro Physics 180mm f/9 APO and Celestron RASA 8"
Mount	10Micron GM 3000 HPS

Institute	Hochtaunus AG Orion
Telescopes	TEC 160 FL and 200 mm f/15 Custom Folded Refractor
Mount	10Micron GM 3000 HPS

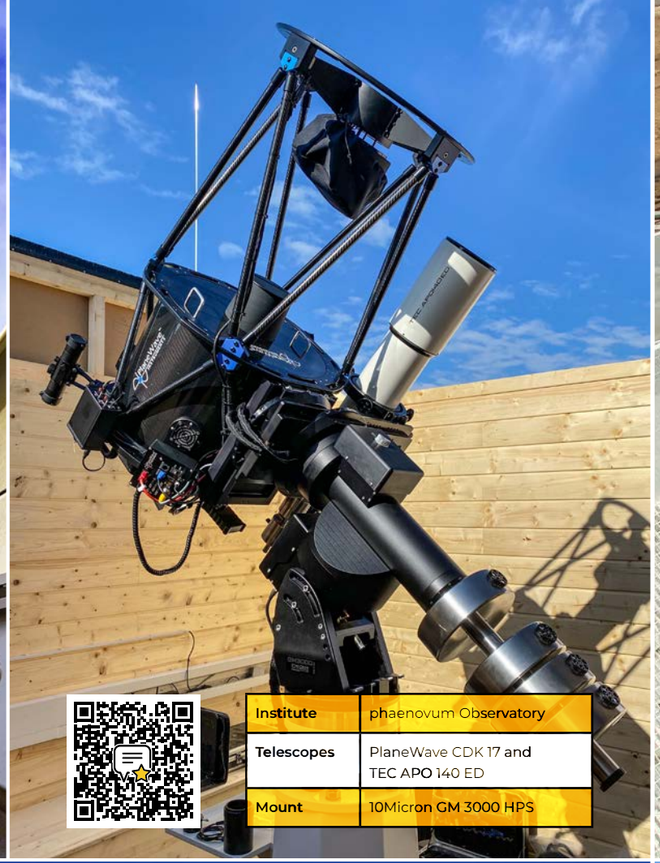
Institute	Rodewisch Observatory
Telescopes	Celestron Edge HD 11 and TEC 140 FL
Mount	10Micron AZ 2000 HPS



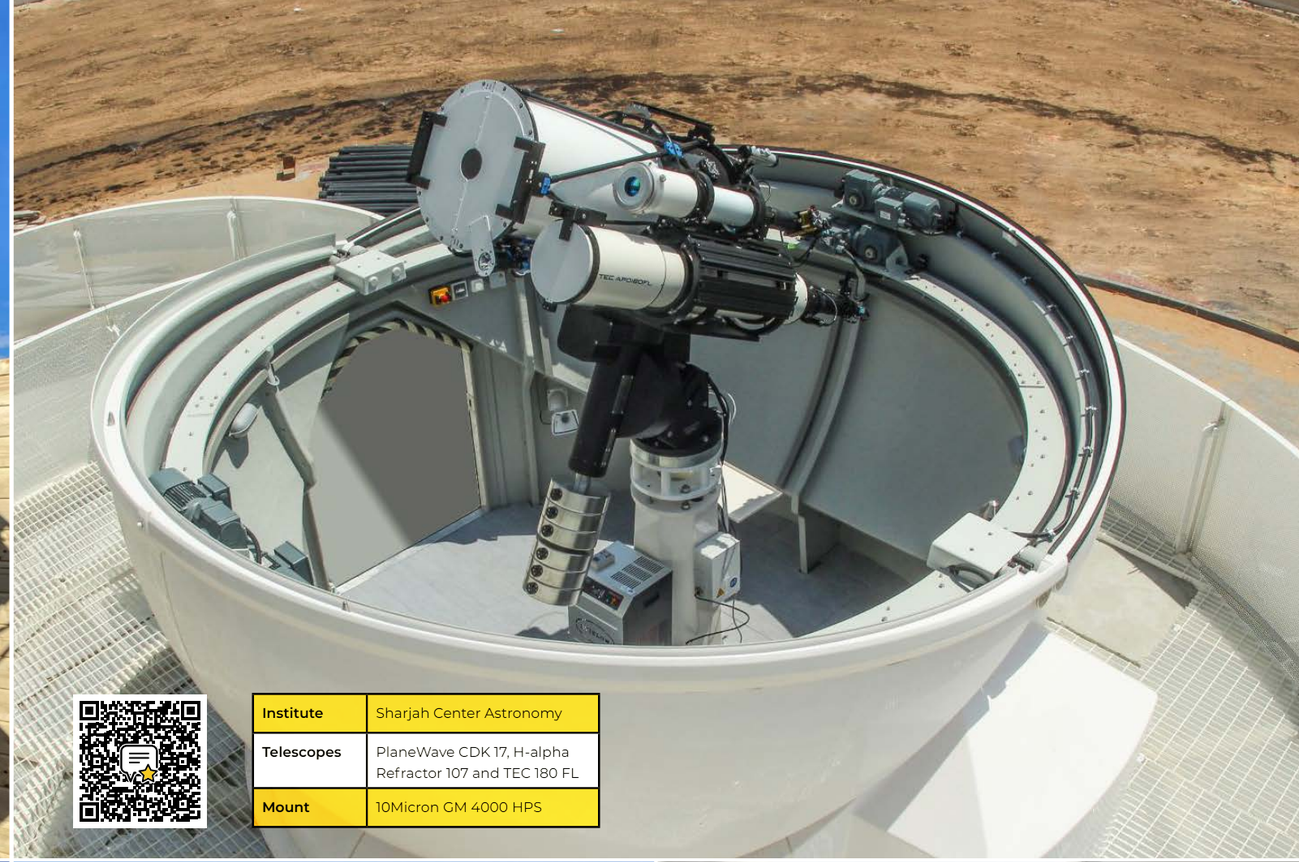
Institute	Rodewisch Observatory
Telescopes	Planewave CDK 20, TEC 160 ED and Celestron RASA 8
Mount	10Micron GM 4000 HPS



Customer	Amateur Astronomer
Telescopes	PlaneWave CDK 20 and Celestron 11" EdgeHD
Mount	10Micron GM 4000 HPS



Institute	phaenovum Observatory
Telescopes	PlaneWave CDK 17 and TEC APO 140 ED
Mount	10Micron GM 3000 HPS



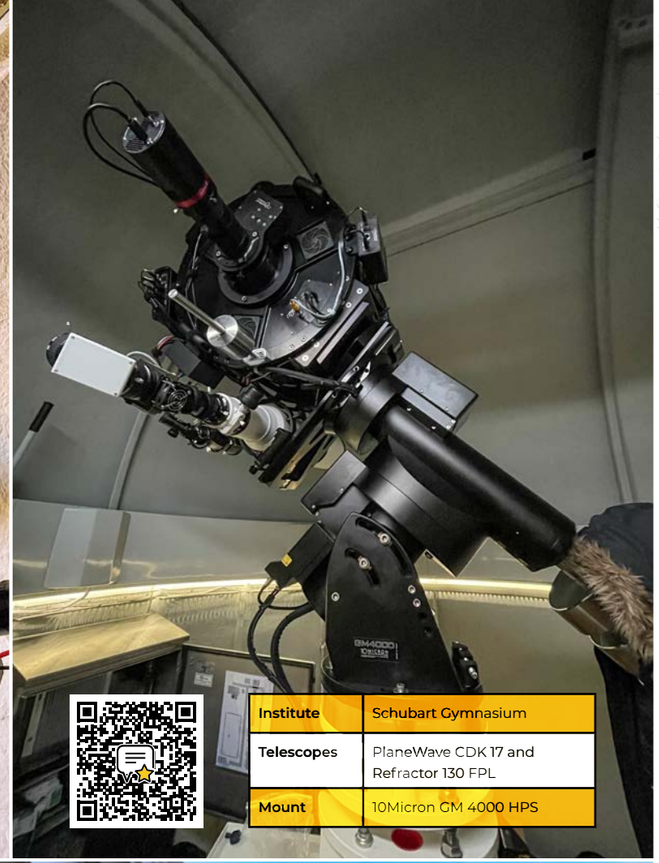
Institute	Sharjah Center Astronomy
Telescopes	PlaneWave CDK 17, H-alpha Refractor 107 and TEC 180 FL
Mount	10Micron GM 4000 HPS

Institute	IAC - ATLAS
Telescopes	16x Celestron 11" RASA f/2.2, mounted with custom solution
Mount	4x PlaneWave L-550

Institute	Carl-Fuhlrott Gymnasium
Telescopes	PlaneWave CDK 20 and TEC APO 160 Triplet
Mount	10Micron GM 4000 HPS

Institute	Einstein Gymnasium
Telescopes	PlaneWave CDK 17 and TEC APO 140 ED
Mount	10Micron GM 3000 HPS

Customer	ATHOS Observatory
Telescopes	PlaneWave CDK 14 and PlaneWave DeltaRho 350
Mount	10Micron GM 3000 HPS



Institute	Schubart Gymnasium
Telescopes	PlaneWave CDK 17 and Refractor 130 FPL
Mount	10Micron GM 4000 HPS

Institute	Ole-Rømer Observatory
Telescopes	PlaneWave CDK 700 and Celestron RASA 8"
Mount	PlaneWave CDK 700

SPECS AT A GLANCE

TECHNICAL DATA

(Double) Mounting Plates

SKU	Name	Weight	Details
2451559	**Heavy-duty 8" Double Mounting Plate 570mm – for Optics up to 17"**	7.1 kg	Up to 100 kg Payload. Predrilled for multiple clamps and plates, such as Baader PAN EQ clamps, Baader Baseplates or Baader 8" PlaneWave clamp
2451561	**Heavy-duty 8" Double Mounting Plate 750mm – for 20" - 24" Optics**	8.8 kg	Up to 150 kg Payload. Predrilled for multiple clamps and plates, such as Baader PAN EQ clamps, Baader Baseplates or Baader 8" PlaneWave clamp
1500330	**Baseplate 300mm for GS Rings I & II and 3" Double Mounting Plate**	0.49 kg	Suitable as baseplate for Baader Guidescope Rings I & II as well as 3" double-mounting plate for various clamps and adapters
1500340	**Baseplate 400mm for GS Rings III**	1.24 kg	Baseplate for Baader Guidescope Rings III
1500341	**Baseplate 500mm for GS Rings IV**	2.88 kg	Baseplate for Baader Guidescope Rings IV
2451558	**Baader Sidewing – for 8" PW clamp**	2.86 kg	Alternative double-mounting option, requires 2 pc on both sides of the 8" clamp

Clamps

SKU	Name	Weight	Details
2451555	**Baader 8" PlaneWave Clamp**	4.15 kg	Required for both 8" double-mounting plates and PlaneWave telescopes ≥ 17"
2451565	**PAN 3"/EQ Dual Dovetail Clamp 370mm**	1.35 kg	Fits all 3" Losmandy- and (Vixen/Celestron/Skywatcher) EQ-style dovetail bars, 370 mm length – with three extra-wide, two-terminal blocks made of brass
2451566	**PAN 3"/EQ Dual Dovetail Clamp 230mm**	0.85 kg	Fits all 3" Losmandy- and (Vixen/Celestron/Skywatcher) EQ-style dovetail bars, 230 mm length – with two extra-wide, two-terminal blocks made of brass
2451525	**PAN EQ Dovetail Clamp 190mm**	0.64 kg	Fits all Vixen / Celestron / Skywatcher EQ-style dovetail bars, 190 mm length

Guidescope Rings

SKU	Name	Weight	Details
1500201	**Guidescope Rings BP I – 60-120mm**	0.76 kg	For tube diameters from 60 to 120 mm
1500202	**Guidescope Rings BP II – 110-160mm**	1.03 kg	For tube diameters from 110 to 160 mm
1500203	**Guidescope Rings BP III – 140-185mm**	1.75 kg	For tube diameters from 140 to 185 mm, inner ring sets recommended (see below)
1500204	**Guidescope Rings BP IV – 175-265mm**	3.66 kg	For tube diameters from 175 to 265 mm, inner ring set for large refractors (#1500510) recommended, reduces the effective maximum tube diameters to 205 – 265 mm
1500500	**GS Inner Ring Set for TEC 140 FL**	0.85 kg	Pair of 2 pieces. Width 28mm, requires GuideScope Rings BP III (#1500203)
1500501	**GS Inner Ring Set for TEC 160 FL**	0.57 kg	Pair of 2 pieces. Width 28mm, requires GuideScope Rings BP III (#1500203)
1500510	**GS Inner Ring Set for Large Refractors**	*tbd*	Pair of 2 pieces. Gets custom produced for your large refractor, please contact us. Width 28mm, requires GuideScope Rings BP IV (#1500204)

Adjustment / Mount Adapters

SKU	Name	Weight	Details
2451515	**PAN-Adjuster, up to 40kg payload**	2.53 kg	For adjusting the optical axis. 46mm height, +/- 1.5° elevation, +/- 5° rotation
2451557	**Intermediate Plate for all 8" plates**	1.68 kg	Allows raising and laterally variable displacement of clamps if space is limited
2450310	**Stronghold Tangent Assembly**	0.68 kg	Payload up to 7kg. For fastening and adjusting lightweight telescopes
2451516	**Adapter for PAN-Adjuster on L-350**	0.24 kg	Height 10mm, Inner Diameter 111mm. Required for adaption on L-350 DDS mount
1453545	**Adapter for 3" clamps on GM/AZ3000**	1.58 kg	Required to mount 3" PAN/EQ clamps directly onto GM / AZ 3000 mounts
1454545	**Adapter for 3" clamps on GM/AZ4000**	2.24 kg	Required to mount 3" PAN/EQ clamps directly onto GM / AZ 4000 mounts

BAADER PLANETARIUM:

PREMIUM REFERENCES

SLR / SSA / LASERCOM

NASA | ESA – European Space Agency | DLR – German Aerospace Center | SSC – Swedish Space Corporation | Airbus Defence and Space | DIGOS – Laser Ranging for Satellites | MPE – Max Planck Institute for Extraterrestrial Physics | arianespace – Launch Services for Satellites | cailabs – Innovative Solutions for Optical Communication | Sybilla Technologies – ABOT

SCIENCE & RESEARCH

The Open University | DWD – German Weather Service | MeteoSwiss – Federal Office of Meteorology and Climatology | MPP – Max-Planck-Institute for Physics | IAC – Instituto Astrofisica D'Canarias | FORTH – Foundation of research and technology Hellas | ESO – European Southern Observatory | AWI – Alfred Wegener Institute | Aarhus University – Ole Rømer Observatory | Heriot Watt University

SINCE 1966

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