# ASTRONOMICAL INSTRUMENTS PRICE LIST

Effective Date: January 1, 2020

# **Contents**

ASTRONOMICAL INSTRUMENTS PRICE LIST	1
Effective Date: January 1, 2020	
SINGLE-CHANNEL PHOTOMETERS	
Photomultiplier Tube Options ( SSP-5/SSP-5A photometers)	
Data Acquisition Software	
Filter Sliders	
Null Serial Cables for SSP Photometers and Perseus	
Photometric Filters for SSP Photometers	
TELESCOPE FOCUSING SYSTEMS	
FocusLynx Telescope Focus Controller Systems	
2-inch Crayford Style Focusers	
3-inch Crayford Style Focusers	
Low-Profile Lead-Screw Focusers	
COMBINATION FOCUSER / ROTATOR	
SECONDARY MIRROR FOCUSERS	
FastFOCUS Secondary Mirror Focusing Systems for Catadioptrics	
OFF-AXIS GUIDER SYSTEM	
Large Off-Axis Guider for heavy camera packages and remote observatories	
TCF FOCUSER OPTIONS	
Temperature Sensor and Remote Focuser Keypad OptionsOptions	
TCF Focuser Conversions and Upgrades	
ADD-ON FOCUS MOTORS	
FocusLynx Dual-Focus Control Hub Compatible Motors	
ThirdLynx Integrated Motors	
PYXIS CAMERA FIELD ROTATORS	
Pyxis LE Camera Field Rotator	
Pyxis 2-inch Camera Field Rotator – NEW! 3 <sup>rd</sup> Generation with Ethernet	
Pyxis 3-inch Camera Field Rotators	
Pyxis LE Accessories	
Pyxis 2" Camera Side Adapters with OPTEC-2300 dovetail	
INSTRUMENT SELECTOR / OPTICAL MANIFOLD	
INTELLIGENT FILTER WHEEL SYSTEMS	
IFW Automated Filter Selector Systems	
6-inch Filter Wheels for IFW 2" Filter Selector	
9-inch Filter Wheels for IFW 3" Filter Selector	
Tab & Spacer Kits for IFW Filter Wheels	
MAXfilter 2" 3-Position Filter Slider	
Optical Bench Mounts for IFW and IFW-3"	
Camera Side Mounting Rings for IFW and MAXfilter	
IFW 3" Telescope Side Front Cover Plates	
IFW 3" Camera Side Rear Cover Plates	
TELECOMPRESSOR LENS SYSTEMS	
NextGEN 2-inch Series Focal Reducer/Telecompressors	
Next Generation Corrector 2 inch Sovies	
Next Generation Corrector 2-inch Series	
Camera Mounting Plates for NGC214 and Lepus-STL	
2-inch Receiver for 2" Telecompressors	



Lepus Telecompressor Series	13
Lepus Series Camera Mounting Plates	13
VLC - Variable Length Camera Adapters for NextGEN, NGC, and Lepus Telecompressors	
Next Generation Corrector 3-inch Series	
Next Generation Corrector 3-inch Series Camera Mounting PlatesPlates	14
3-inch Receiver for 3" Telecompressors	14
LIBRA DOVETAIL MOUNTING SYSTEM	
ELECTRO-LUMINESCENT FLAT FIELD DEVICES	
Field Fielding CCD Calibration Panels from Alnitak AstroSystems	15
Alnitak Bahtinov Mask and Remote Dust Cover	15
TELESCOPE ADAPTERS	16
OPTEC-2400 Dovetail Mounts	16
Telescope Adapter to OPTEC-2400 Male	
OPTEC-2400 Female Dovetail Receiver Adapters	16
OPTEC-3600 Dovetail Mounts	
Telescope Adapter to OPTEC-3600 Male	
OPTEC-3600 Female Dovetail Receiver Adapters	
OPTEC-4300 4.3-inch Dovetail Mount and Camera Adapters	
CAMERA SIDE ADAPTERS	
2-inch Drawtube Adapters for TCF 2-inch Focusers. Also known as nosepiece adapters	
OPTEC-3000 3-inch Drawtube Adapters for TCF-3, TCF-Leo, Pyxis-3, and IFW-3	
OPTEC-3000-S Short 3-inch Drawtube Adapters for Sagitta Off-Axis Guider	
THREADED SPACERS AND ADAPTERS	
T-thread Adapters with M42x0.75mm threads	21
STL thread adapters with 2.156" x 24tpi threads	
AP 2.7 x 24tpi Threaded Adapters and Extensions	
Standard 3x24tpi Threaded Adapters	
Optec-DSI 3.5x24tpi Threaded Adapters and Extensions	
COMBINATION CAMERA/TELESCOPE ADAPTERS	
OPTEC-2100 Adapters and Accessories for NextGEN, Lepus, and original Pyxis 2" Rotator	
Other Adapters and Threaded Extensions	
Celestron EdgeHD Accessories	
OFF-AXIS FOCUS DEVICE	
SOFTWARE TOOLS	
CABLES AND CONVERTERS	
USB-to-Serial Converters	
PC Serial Port Converter	
PC Serial Cables for Optec devices	
USB/Serial Cables	
Control Cables for TCF-S and IFW Systems	
POWER AND BATTERY	
Battery and Power Supplies	
REPAIR SERVICES AND REPLACEMENT PARTS	26



<b>SINGLE</b>	-CHANNEL PHOTOMETERS	
<u>17003</u>	Model SSP-3 Solid State Stellar Photometer, Generation 2.	\$1,495.00
	Includes: 1½" telescope coupler, 1 mm diameter photodiode with 1 mm field aperture, 9V rechargeable battery, 12VDC power supply/charger for 100-240 VAC input, and trial SSPDataq3 software. Order 2-position filter slider, filters, and serial cable separately below. See <a href="Photometric Filters for SSP">Photometric Filters for SSP</a> section below for filter options.	
<u>17005</u>	Model SSP-3A Automated Solid-State Stellar Photometer, Generation 2.	\$1,695.00
	Includes: 11/4" telescope coupler, 1 mm diameter photodiode with 1 mm field aperture, stepper motor, 12VDC power supply for 100-240 VAC input, and trial SSPDataq3 software. Order 6-position filter slider, filters, and serial cable separately below. See <a href="Photometric Filters for SSP">Photometric Filters for SSP</a> section below for filter options.	
<u>17007</u>	Model SSP-5 PMT Stellar Photometer, Generation 2.	\$2,295.00
	Includes: 1½" telescope coupler, 1 mm field aperture, 12VDC power supply for 100 – 240 VAC input, and trial SSPDataq3 software. Order PMT, 2-position filter sliders, filters, serial communications cable, and full SSPDataq3 Reduction Software separately below.	
<u>17009</u>	Model SSP-5A Automated PMT Stellar Photometer, Generation 2.	\$2,695.00
	Includes: 1¼" telescope coupler, 1 mm field aperture, filter slider stepper motor, 12VDC power supply for 100 – 240 VAC input, and trial SSPDataq3 software. Order PMT, 6-position filter slider, filters, serial communications cable, and full SSPDataq3 Reduction Software separately below.	
Photomul	tiplier Tube Options ( SSP-5/SSP-5A photometers)	
<u>17015</u>	Hamamatsu R6350 Sb-Cs PMT with S-5 response (185 to 650 nm).	\$595.00
<u>17017</u>	Hamamatsu R6358 Multialkali PMT with extended red response (185 to 830 nm).	\$895.00
Data Acar	uisition Software	
17030	SSPDataq3 photometer control, data acquisition and reduction package – UBVRI Photometry.	\$295.00
<u> </u>	This software program is an expansion of the trial SSPDataq3 provided with the SSP photometers or from our software download site. Program supports UBVRI data acquisition and complete UBVRI data reduction. The registered setup program is e-mailed to the user after purchase. We require a valid e-mail address for delivery. A CD with the program can be provided if requested.	,
Filter Slid	lers	
<u>17050</u>	2-position filter slider for manual photometers.	\$75.00
<u>17052</u>	6-position filter slider for automatic photometers.	\$225.00
Null Sorio	d Cables for SSP Photometers and Perseus	
Trun Seria	RS-232 null modem cable for connection between PC DB-9 serial port and DB-9 port on SSP photometers.	
<u>17154</u>	6-ft. Serial cable for SSP photometers, DB-9 (female /female)	\$25.00
<u>17155</u>	10-ft. Serial cable for SSP photometers, DB-9 (female /female).	\$35.00
<u>17156</u>	15-ft. Serial cable for SSP photometers, DB-9 (female /female).	\$45.00
<u>17157</u>	25-ft. Serial cable for SSP photometers, DB-9 (female /female).	\$55.00
Photometi	ric Filters for SSP Photometers.	
17031	Johnson U (Ultra-Violet) filter for SSP-3 or SSP-5 with R6358 PMT	\$125.00
17032	Johnson B (Blue) filter for SSP-3 or SSP-5 with R6358 or R6350 PMT	\$150.00
17033	Johnson V (Visual) filter for SSP-3 or SSP-5 with R6358 PMT	\$125.00
17034	Johnson R (Red) filter for SSP-3 or SSP-5 with R6358 PMT.	\$125.00
17035	Johnson I (Infrared) filter for SSP-3	\$125.00
17036	Clear filter window for any SSP photometer, 7mm thick, 12.5mm diameter.	\$50.00
17041	Johnson U (Ultra-violet) filter for SSP-5 with R6350 PMT.	\$125.00
17043	Johnson V (Visual) filter for SSP-5 with R6350 PMT.	\$125.00



# TELESCOPE FOCUSING SYSTEMS

FocusLvn.	x Telescope Focus Controller Systems	
19690	FocusLynx dual-focuser Control Hub	\$325.00
<u> 17070</u>	Focus controller capable of controlling two separate stepper driven focusers with Cat5 Ethernet, Wireless 802.11, and serial /USB computer input. Includes built-in step driver board for Focuser 1, universal power supply, and 7-ft. Cat-5e network cable.	70-2000
19695	FocusLynx Hand Control with Fine Focus and Digital Read Out	\$175.00
	External Hand Control provides manual control and position digital read-out with Mode, IN/OUT buttons, and rotary knob for fine focus control. Includes 6-ft. and 25-ft. coiled handset cables.	
<u>19695</u>	Fine Focus Knob upgrade for FocusLynx Hand Control.	\$65.00
	Requires return of Hand Controller to Optec. Contact sales@optecinc.com for details.	
<u>19695-FB</u>	Fine Focus Knob upgrade for Focus Boss II Hand Control.	\$85.00
	Focus Boss II Hand Control requires additional machining operation to make room for the rotary encoder switch. Requires return of Hand Controller to Optec. Contact <a href="mailto:sales@optecinc.com">sales@optecinc.com</a> for details.	
<u>19533</u>	Focus Lynx step driver board for second focuser	\$30.00
	Add-on socketed stepper control driver board for addition of second focuser. Specify focuser to be added. Includes 7-ft. Cat-5e focuser control cable. Factory installation available.	
<u>19691</u>	Universal mounting bracket for Focus Lynx Control Hub.	\$35.00
<u>19539</u>	Focus Lynx precision temperature probe kit.	\$95.00
	Includes splitter board, temperature probe, and 3-ft. motor cable for QuickSync focus motors.	
19698	Converter for Robo-Focus motor, RJ45 to DB9.	\$20.00
	Allows control of Robo-Focus and Moonlite motors with the Focus Lynx system.	
19699	Cable for original FeatherTouch/MicroTouch unipolar motor, 6-ft. length.	\$20.00
	RJ45 to RJ12, 8-pin to 6-pin cable for control of original Microtouch motors with RJ12 socket.	
19755	Optec WiFi 802.11bg Wireless Network board.	\$195.00
	NEW! Second generation WiFi board with 802.11b/g connectivity to local wireless networks. Works with both FocusLynx and Gemini control boards.	
2-inch Cray	oford Style Focusers	
17668	Model TCF-Si, Integrated Temperature Compensating Focuser.	\$725.00
<u> </u>	Complete 2" TCF-Si focuser with integrated control circuit. Includes TCF-Si focuser, temperature sensor probe with 20" cable, 12VDC power supply with cord, and 6-ft. USB/Serial cable. Order OPTEC-2400 telescope mount and optional 2-inch adapters separately.	7,2000
	[OPTEC-2400 female dovetail // 2-Inch I.D. female receiver]	
<u>19700</u>	TCF-Lynx, 2" Temperature Compensating Focuser with FocusLynx Controller.	\$875.00
	TCF-Lynx focuser with FocusLynx control system includes 2-inch Crayford style focuser, FocusLynx controller, 20-inch long temperature probe, 12VDC power supply, 7-ft. Cat-5e cable for FocusLynx to TCF-Lynx connection, and 6-ft. USB/Serial cable for PC connection. Order OPTEC-2400 Telescope Mount and optional 2-inch adapters separately.	
19701	[OPTEC-2400 female dovetail //2-inch I.D. female receiver]  Model TCF-Lynx [NC]. 2" Temperature Compensating Focuser.	\$595.00
17/01	TCF-Lynx 2-inch Crayford style focuser without controller. Configured for use with Focus Lynx Control Hub as second focuser.	φυγυ.00
	Includes 20-inch temperature probe and 7-ft. Cat-5e cable for connection to Focus Lynx Hub. Order telescope mount, Focus Lynx Controller Hub, and second Focus Lynx step driver board (#19533) separately.  [OPTEC-2400 female dovetail // 2-Inch I.D. female receiver]	



3-inch Cra	syford Style Focusers	
17678	Model TCF-S3i, 3" Integrated Temperature Compensating Focuser.	\$1,595.00
	Complete 3-inch TCF-S3i focuser with integrated control circuit. Includes TCF-S3i focuser, temperature sensor probe with 20"	
	cable, 12VDC power supply with cord, and 6-ft. USB/Serial cable. Order OPTEC-4300 telescope mount and optional 3-inch	
	adapters separately. [OPTEC-4300 female dovetail // 3-Inch I.D. female receiver]	
19706	TCF-Lynx3, 3" Temperature Compensating Focuser with FocusLynx Controller.	\$1,795.00
19700	TCF-Lynx3 focuser with FocusLynx control system includes 3-inch Crayford style focuser, FocusLynx controller, 20-inch long	. ,
	temperature probe, power supply, 7-ft. Cat-5e cable and 6-ft. USB/Serial cable for PC connection. Order OPTEC-4300	
	Telescope Mount separately. TCP/IP control through Ethernet wired or wireless network is optionally available. [OPTEC-4300 female dovetail //3-inch I.D. female receiver]	
19707	TCF-Lynx3 [NC], 3" Temperature Compensating Focuser.	\$1,495.00
<u>17707</u>	TCF-Lynx3 focuser for use with FocusLynx control system. Includes 3-inch Crayford style focuser, 20-inch long temperature	φ1,125.00
	probe, power supply, 7-ft. Cat-5e cable for FocusLynx to TCF-Lynx3 connection. Order OPTEC-4300 Telescope Mount and	
	FocusLynx Controller separately.	
	[OPTEC-4300 female dovetail //3-inch I.D. female receiver]	
Low-Profit	le Lead-Screw Focusers	
19740	TCF-Leo Low-Profile Focuser	\$1,295.00
	Very low profile 3-inch focuser – only 1-1/4" thick with 0.35" (8.9mm) of drawtube travel. Includes FocusLynx control hub, power	
	supply, cables, and 20-inch temperature probe. Specify OPTEC-3600 telescope-side mount and OPTEC-3000 3-inch drawtube	
	camera-side mount separately. [OPTEC-3600 female receiver // OPTEC-3000 3-inch I.D. female receiver]	
19740-нс	TCF-Leo Low-Profile Focuser with Hand Control	\$1,395.00
19740-NC	TCF-Leo without FocusLynx control hub.	\$995.00
	Requires customer supplied FocusLynx or FocusBoss II control hub.	
19741	TCF-Leo Extended Height Focuser.	\$1,295.00
	Variant of the TCF-Leo with taller drawtube to ensure optimal positioning at midpoint of travel. Drawtube is 6.4mm taller than	
107.40	standard TCF-Leo. Contact Optec Sales for details.	Φ1 <b>2</b> 05 00
19742	TCF-Leo Low-Profile Focuser with Optec-DSI 3.5" Receiver Drawtube	\$1,295.00
10744	Special variant of the TCF-Leo focuser with direct receiver drawtube for the Optec-DSI 3.5" spacer and adapter set.	¢125.00
19744	Split-Clamp drawtube for TCF-Leo Low-Profile Focuser.	\$125.00
19745	TCF-Leo with 3-inch Split-Clamp Mount drawtube for Wynne Correctors.  Special variant of the TCF-Leo 3-inch focuser with a spli-clamp drawtube to fit large Wynne Correctors. Allows for adjustments	\$1,395.00
	in spacing between corrector and primary mirror. Contact Optec for details.	
COMBIN	VATION FOCUSER / ROTATOR	
19750	Gemini 96 Focusing Rotator	\$3,495.00
	Gemini Focusing Rotator provides both focus and rotation in a single device. Wide 3.75" opening designed for very large	
	payload systems with limited back-focus. Overall thickness is 2.25" with ½" of focuser travel. Package includes Gemini controller, Hand Controller, power supply, cables and Pelican type case. Order OPTEC-4300 adapters for telescope and camera	
	side connections. Stock item #19830 OPTEC-4300 to DSI 3.5x24tpi threaded adapter is now included for the camera side	
	mount. See Optec-DSI 3.5x24tpi threaded extension section for spacer selections.	
10851	[OPTEC-4300 female dovetail // OPTEC-4300 female dovetail (includes DSI 3.5 female adapter)]	<b>0.4.40</b> = 0.0
19751	Gemini 120 Big-Bore Focusing Rotator  Special variety of the Comini Focusing Rotator with large 120mm appairs. Be designed throat hearing allows even more light	\$4,495.00
	Special variant of the Gemini Focusing Rotator with large 120mm opening. Re-designed thrust bearing allows even more light throughput and heavier loads than the original Gemini 96mm Focusing Rotator.	
19752	Gemini Hand Controller with rotational encoder button	\$195.00
->. <b>5</b> -	Digital read-out, 3-button interface with rotary switch. Includes short and long coiled telephone handset cables.	,
	Now included with every new Comini Featuring Detector	



Now included with every new Gemini Focusing Rotator.

\$350.00

## SECONDARY MIRROR FOCUSERS

FastFOCU	S Secondary Mirror Focusing Systems for Catadioptrics	
<u>19711</u>	C11 FastFOCUS Secondary Mirror Focusing System	\$1,195.00
	Stepper driven secondary focuser system for Celestron C1100 EdgeHD and other Fastar compatible C11 telescopes. Includes Focus Lynx controlling hub and Focus Lynx Hand Control below. Contact Optec for details.	
<u> 19714</u>	C14 FastFOCUS Secondary Mirror Focusing System	\$1,195.00
	Stepper driven secondary focuser system for Celestron C1400 EdgeHD and other Fastar compatible C14 telescopes. Includes Focus Lynx controlling hub and Focus Lynx Hand Control below. Contact Optec for details.	
19721	Split-wiring kit for C11HD FastFocus	\$95.00
19724	Split-wiring kit for C14HD FastFocus	\$95.00
_	XIS GUIDER SYSTEM	
0 00	-Axis Guider for heavy camera packages and remote observatories.	
19340	Axis Guider for heavy camera packages and remote observatories.  Sagitta Off-Axis Guider with integrated stepper motor.	\$895.00
0 00	C-Axis Guider for heavy camera packages and remote observatories.  Sagitta Off-Axis Guider with integrated stepper motor.  Large 3-inch aperture off-axis guider with variable height pick-off prism stalk, smooth helical focuser and integrated focus motor. Includes #19871 male AP2.7 adapter and #19872 female AP2.7 adapter. Requires FocusLynx control hub.	\$895.00
0 00	C-Axis Guider for heavy camera packages and remote observatories.  Sagitta Off-Axis Guider with integrated stepper motor.  Large 3-inch aperture off-axis guider with variable height pick-off prism stalk, smooth helical focuser and integrated focus motor. Includes #19871 male AP2.7 adapter and #19872 female AP2.7 adapter. Requires FocusLynx control hub.  See OPTEC-3000-S adapter section for additional mounting options.	\$895.00 \$595.00
19340	C-Axis Guider for heavy camera packages and remote observatories.  Sagitta Off-Axis Guider with integrated stepper motor.  Large 3-inch aperture off-axis guider with variable height pick-off prism stalk, smooth helical focuser and integrated focus motor. Includes #19871 male AP2.7 adapter and #19872 female AP2.7 adapter. Requires FocusLynx control hub.	,

Replacement or add-on motor assembly for Sagitta Off-Axis Guider. Simple installation with 4 included socket cap screws.

Add-on Motor for manual version Sagitta Off-Axis Guider

Requires FocusLynx Dual-Focus control hub for operation.

Temperature Sensor and Remote Focuser Keypad Options

## **TCF FOCUSER OPTIONS**

19349

17565	TCF-S firmware update chip.	\$25.00
	User replaceable microprocessor chip for original TCF-S, TCF-Si, TCF-S3, or TCF-S3 focuser. Brings firmware to current standards for full featured functionality with TCF-S ASCOM driver and TCF Commander software.	
177.60	NOTE: Specify original focuser model for correct Firmware version.	<b>\$40.00</b>
17560	Replacement temperature sensor probe for TCF / Gemini focusers.	\$40.00
	Standard length is 20-inches. Custom lengths up to 6-ft. available for an additional \$20.	
17680	Remote IN/OUT Keypad for TCF-S and TCF-Lynx and Gemini.	\$75.00
	Red anodized aluminum hand paddle with IN and OUT pushbuttons works very well with any TCF model focuser including the new TCF-Lynx focusers. Plugs into temperature probe connector on the motor housing and allows for manual focusing. Connection is hot swappable. Standard cable length is 3 feet.	, , , , ,
TCF Foci	user Conversions and Upgrades	
17725	Upgrade classic TCF-S or TCF-Si to TCF-Lynx [NC]	\$195.00
	Upgrade for use with FocusLynx Control Hub. Requires return of TCF-S/Si focuser body for new motor and motor housing end-cap with RJ45 socket connector. Order FocusLynx Control Hub (#19690) separately.	·
17726	Upgrade classic TCF-S3 or TCF-S3i to TCF-Lynx3 [NC]	\$225.00



Upgrade for use with FocusLynx Control Hub. Requires return of TCF-S3/S3i focuser body for new motor and motor housing

end-cap with RJ45 socket connector. Order FocusLynx Control Hub (#19690) separately.

## ADD-ON FOCUS MOTORS

Custom designed focus motors for a variety of manual dual-speed focusers are available with FocusLynx compatibility or with stand-alone ThirdLynx control systems. QuickSync motors replace both fine and coarse focus knobs on the right side of most manual focusers while DirectSync motors replace the coarse knob on the left side of the focuser. DirectSync motors provide a direct geared connection to the rack-and-pinion focus. Each DirectSync and QuickSync motor has been specially designed for perfect fit without belts or pulleys.

## FocusLynx Dual-Focus Control Hub Compatible Motors

<u>19765</u>	QuickSync MEF motor for Takahashi MEF dual-speed focusers.	\$335.00
19765US	QuickSync MEF motor for silver knob US-made MEF Takahashi focusers.	\$335.00
19767	DirectSync FSQ130 motor for Takahashi FSQ-130ED with native dual-speed focuser.	\$375.00
19768	QuickSync SV20 for older Stellarvue 2-inch focusers.	\$335.00
19770	QuickSync FT20R motor for FeatherTouch 2-inch Rack-and-Pinion focusers.	\$335.00
<u>19771</u>	QuickSync FT20 motor for FeatherTouch 2-inch focusers.	\$335.00
<u>19772</u>	QuickSync FT30 motor for FeatherTouch 2.5, 2.7 and 3-inch focusers.	\$335.00
<u>19773</u>	QuickSync FT40 motor for FeatherTouch 3.5-inch focusers.	\$335.00
19775	DirectSync ACF motor assembly for Meade ACF f/8 built-in dual-speed focuser.	\$375.00
19776	DirectSync APO motor assembly for many Apochromat refractors.	\$375.00
<u> 19777</u>	DirectSync TEC motor for TEC Large Focuser for the APO140 and larger scopes.	\$375.00
<u>19778</u>	DirectSync SV motor for Stellarvue 2-1/2 and 3-inch focuser.	\$375.00
19779	DirectSync TPO motor for Third-Planet Optics native focusers.	\$375.00
19780	DirectSync SV35 motor for Stellarvue 3-1/2-inch focuser.	\$375.00
19782	DirectSync ES25 motor for Explore Scientific 2.5-inch hex focuser.	\$375.00
19787	DirectSync SW25 motor for SkyWatcher Esprit 80mm telescope focuser.	\$375.00
19788	DirectSync SW30 motor for SkyWatcher Esprit 100/120/150mm telescope focusers.	\$375.00

### ThirdLynx Integrated Motors

ThirdLynx controllers are integrated directly into the motor endcap and provide USB connectivity to a control PC. 12VDC power is required and supplied with each motor. ThirdLynx functions similar to original FocusLynx with the same software drivers and controls. Contact Optec Support for focusers not listed.

<u>19965</u>	QuickSync TKX motor for Takahashi MEF dual-speed focusers.	\$495.00
19968	QuickSync SVX20 for older Stellarvue 2-inch focusers.	CALL
19970	QuickSync FTX20R motor for FeatherTouch 2-inch Rack-and-Pinion focusers.	\$495.00
<u>19971</u>	QuickSync FTX20 motor for FeatherTouch 2-inch focusers.	\$495.00
<u>19972</u>	QuickSync FTX30 motor for FeatherTouch 2.5, 2.7 and 3-inch focusers.	\$495.00
<u>19973</u>	QuickSync FTX40 motor for FeatherTouch 3.5-inch focusers.	\$495.00
19975	DirectSync ACF motor assembly for Meade ACF f/8 built-in dual-speed focuser.	CALL
19976	DirectSync APX25 motor assembly for many Apochromat refractors.	\$495.00
<u>19978</u>	DirectSync SVX30 motor for Stellarvue 2-1/2 and 3-inch focuser.	\$495.00
19979	DirectSync TPO motor for Third-Planet Optics native focusers.	\$495.00
19980	DirectSync SVX35 motor for Stellarvue 3-1/2-inch focuser.	\$495.00
19982	DirectSync ESX25 motor for Explore Scientific 2.5-inch Hex focuser.	\$495.00
19983	DirectSync ESX30 motor for Explore Scientific 3-inch Hex focuser.	\$495.00
19984	DirectSync CRX8 focus motor for Celestron RASA 8-inch OTA.	\$495.00
19988	DirectSync SWX30 motor for SkyWatcher Esprit 100/120/150mm telescope focusers.	\$495.00



#### PYXIS CAMERA FIELD ROTATORS

#### Pyxis LE Camera Field Rotator

#### 19630 Pyxis LE T-mount Camera Field Rotator.

\$695.00

Ted Agos Signature Series camera rotator with integrated 2-inch nosepiece barrel and T-thread camera mount. Includes integrated 2-inch barrel for easy insertion into the Optec TCF-S or any 2-inch focuser, low profile main body, and male T-thread for direct attachment of any T-thread camera. Includes power supply, USB cable, and driver CD with ASCOM and stand-alone drivers. PC connection is required for operation. Original concept design by Ted Agos. [2-inch male barrel mount // male M42x0.75mm T-thread]

# Pyxis 2-inch Camera Field Rotator – NEW! 3<sup>rd</sup> Generation with Ethernet

# 19645 Pyxis 2-inch GEN 3 Camera Field Rotator.

\$1,195.00

3<sup>rd</sup> Generation Pyxis 2-inch camera rotator attaches directly to most CCD camera using any of the Pyxis 2" camera mounts below. On the telescope side, the standard 2-inch nosepiece will push-fit directly into TCF-S or any 2-inch ID focuser. The Pyxis 2-inch Gen3 includes built-in serial and Ethernet ports for remote operations – no external hand control is required. Includes 12VDC power supply with cord, standard 2-inch nosepiece, T-thread camera mount, Ethernet cable, and 6-ft. Serial/USB cable. External control PC is required for operation.

[OPTEC-2400 receiver with 2-inch barrel mount installed // OPTEC-2300 female dovetail with male M42x0.75mm T-thread]

#### Pyxis 3-inch Camera Field Rotators

## 17746 Pyxis 3-inch Gen2 Camera Field Rotator with AP2.7 Female Threaded Receiver.

\$1,995.00

Second Generation Pyxis 3-inch camera rotator is a massive unit for large telescopes and heavy instrument packages. The Pyxis 3-inch includes a built-in side-mounted serial port for remote operations – no external hand control is required. Includes 15VDC power supply with right angle power plug and cord and 6-ft. USB/Serial cable. Order appropriate OPTEC-3600 telescope mount above. A PC connection is required for operation of the Pyxis 3-inch. Only 50mm thick. [OPTEC-3600 female dovetail // AP2.7 female threaded receiver]

#### 17747 Pyxis 3-inch Gen2 Camera Field Rotator with OPTEC-3000 3-inch Receiver.

\$1,995.00

Second Generation Pyxis 3-inch camera rotator is a massive unit for large telescopes and heavy instrument packages. The Pyxis 3-inch includes a built-in side-mounted serial port for remote operations – no external hand control is required. Includes 15VDC power supply with right angle power plug and cord and 6-ft. USB/Serial cable. Order appropriate OPTEC-3600 telescope mount above. A PC connection is required for operation of the Pyxis 3-inch. Standard 3-inch receiver is 61mm thick. [OPTEC-3600 female dovetail // OPTEC-3000 3-inch female receiver]

## 17748 Pyxis 3-inch Gen2 Camera Field Rotator with Female DSI 3.5x24tpi threaded Receiver.

\$1,995.00

Second Generation Pyxis 3-inch camera rotator is a massive unit for large telescopes and heavy instrument packages. This Gen2 Pyxis 3" introduces a DSI 3.5x24tpi threaded receiver for use with DSI spacers listed above. The Pyxis 3-inch includes a side-mounted serial port for remote operations – no external hand control is required. Includes 15VDC power supply with right angle power plug and cord and 6-ft. USB/Serial cable. Order appropriate OPTEC-3600 telescope mount above. A PC connection is required for operation of the Pyxis 3-inch. DSI receiver rotators are 51.5mm thick. [OPTEC-3600 female dovetail // DSI 3.5x24tpi female thread]

## Pyxis LE Accessories

#### 19631 Pyxis LE Retainer Kit for f/6.3 SCT telecompressors and other 43mm optics.

\$65.00

Special retaining set and spanner tool for insertion of Celestron, Meade, Antares, and other small telecompressor optics for integration into Pyxis LE nosepiece.



Pyxis 2" (	Camera Side Adapters with OPTEC-2300 dovetail	
	Each camera side adapter has a male OPTEC-2300 dovetail to fit the rear OPTEC-2300 receiver on the #17469 IFW OPTEC-2300 Receiver, Pyxis 2", or the #19620 Perseus parfocal receiver.	
17633	Pyxis mount for M48x0.75mm threaded interface.	\$60.00
17637	2-inch to OPTEC-2300 dovetail expansion collar.	\$30.00
	Allows any 2-inch nosepiece to attach inside Pyxis 2" GEN3 rotator. Especially designed for Baader MPCC corrector.	
<u>17643</u>	Pyxis QSI camera mount.	\$60.00
	[OPTEC-2300 male dovetail // QSI 4-bolt pattern]	
<u>17644</u>	Pyxis STL camera mount with OPTEC-2300 male dovetail.	\$60.00
	[OPTEC-2300 male dovetail // SBIG STL 4-bolt hole mount]	
<u>17646</u>	Pyxis T-thread camera mount.	\$60.00
	This adapter allows use of NextGEN reducers to work with most SBIG cameras without CFW wheel. However, SBIG cameras using the CFW wheel must also purchase the 17654 extender tube. This moves the camera further back so that the CFW motor does not interfere with the Pyxis [OPTEC-2300 male dovetail // T-thread 42x0.75 mm male thread]	
17647	Pyxis Pentax camera mount.	\$60.00
17047	[OPTEC-2300 male dovetail // Pentax M42x1 mm male thread]	φοσ.σσ
17648	Pyxis SCT short threaded camera mount.	\$60.00
17010	Short threaded mount is intended to fit Apogee and similar cameras with the SCT 2-inch x 24 TPI thread [OPTEC-2300 male dovetail // 2-inch 24tpi SCT male thread]	7.000
<u>17657</u>	Pyxis SCT long threaded mount	\$60.00
	Long threaded mount will fit the standard Meade/Celestron visual back, AO-7 and f/6.3 reducer.  [OPTEC-2300 male dovetail // 2-inch 24tpi SCT male thread]	
<u>17649</u>	Pyxis C-thread camera mount.	\$60.00
	[OPTEC-2300 male dovetail // C-mount 1-inch male thread]	
<u>17650</u>	Pyxis STL 2.156"x 24tpi male thread. [OPTEC-2300 male dovetail // SBIG STL / QSI 2.156" x 24tpi male thread]	\$60.00
17654	Extender tube, 16mm length (OPTEC-2300 male dovetail to OPTEC-2300 female receiver).	\$45.00
<u>17034</u>	The extender tube moves the camera away from the Pyxis by 16 mm. Mounts between the camera adapter and Pyxis. This is sometimes needed if some member of the camera or camera filter wheel obstructs the Pyxis during rotation. In order for the CFW-8/9 filter wheel from SBIG to be used, this adapter must be added to the T-thread camera mount stock number 17646.	ψ 15.00
INSTRU	MENT SELECTOR / OPTICAL MANIFOLD	
19605	Perseus 4-Port Instrument Selector, GEN 3.	\$3,495.00
	Complete third generation motorized instrument selector system with four optical ports. Now includes Optec standard USB/Serial communication cable and integrated Ethernet connectivity. Perseus 4-Port Instrument Selector includes one 3-inch port with OPTEC-3600 male dovetail mount, three 2-inch ports with Parfocal rings including integral OPTEC-2300 receivers, covers for each port, 6-ft. USB/serial cable for remote control, and control software.  Contact Optec for detailed telescope configuration, port recommendations, and formal quotation.	
19608	OPTEC-3600 shipping and dust cover for Perseus and other OPTEC-3600 receivers.	\$75.00
19609	3-piece replacement dust cover set for 2-inch ports.	\$95.00
19611	Low profile Blank Cover Plate for 2-inch port.	\$75.00
19612	2-inch Saddle with OPTEC-2400 dovetail mount, threaded for Parfocal mount (#19620 below).	\$75.00
19619	Dust cover for OPTEC-3600 dovetail.  Perfecel mount with integral OPTEC 2300 devetail receiver and leaking retainer ring	\$45.00
19620	Parfocal mount with integral OPTEC-2300 dovetail receiver and locking retainer ring.	\$75.00



## INTELLIGENT FILTER WHEEL SYSTEMS

IFW Autor	nated Filter Selector Systems	
<u>17350</u>	IFW 2" Intelligent Filter Selector System.  Includes IFW filter selector system with integrated stepper motor, intelligent controller box with SBIG CFW-8 emulation and PC serial modes. Includes 12 VDC power supply with cord, 12-ft. Control cable, and 6-ft. USB/Serial cable. Order OPTEC-2400 telescope mount, IFW mounting ring, filter wheels, and filters separately.  [OPTEC-2400 female dovetail // OPTEC-2380 female thread]	\$850.00
<u>17360</u>	IFW 3" Intelligent 3" Filter Selector System.  Includes IFW 3" selector system with integrated stepper motor, intelligent controller box with SBIG CFW-8 emulation and PC serial modes. Includes 12 VDC power supply with cord, 12-ft. Control cable, and 6-ft. USB/Serial cable. Order 3" telescope mount, rear camera side adapters, filter wheels and filters separately.  [OPTEC-3600 female dovetail (w/ #17368) // OPTEC-3000 receiver (w/ #17367)]	\$1,350.00
6-inch Fili	er Wheels for IFW 2" Filter Selector	
<u>17353</u>	5-position Filter Wheel for 2" diameter filters with mounting tabs  New filter wheel design allows filters to be easily installed and removed with delrin tabs and spacers. Tab and spacer kit #17584 is included.	\$225.00
17354	7-position Filter Wheel Carousel for 36mm diameter filters with mounting tabs.  New filter wheel design allows installation of seven 36mm diameter filters for astronomical use.	\$225.00
<u>17356</u>	5-position Filter Wheel for 50mm diameter filters with mounting tabs  New filter wheel design allows filters to be easily installed and removed with delrin tabs and spacers. Tab and spacer kit #17581 is included.	\$225.00
<u>17357</u>	<b>8-position Filter Wheel, for 25.4m filters with mounting tabs</b> New filter wheel design allows filters to be easily installed and removed with delrin tabs and spacers. Tab and spacer kit #17580 is included.	\$245.00
9-inch Filt	er Wheels for IFW 3" Filter Selector	
<u>17361</u>	5-position Filter Wheel for 58mm Square Filters with mounting tabs Wheel design allows for up to 5 filters of 58mm square size to be user installed. The 58mm square filters are a new standard from Optec. Wheel can easily be inserted into the filter wheel selector without removing anything from the instrument train. Tab and spacer kit #17586 is included. This configuration requires the Rear 3" Cover plate #17367 and the Telescope Adapter for 3" #17368.	\$345.00
<u>17362</u>	6-position Filter Wheel for 50mm Square Filters with mounting tabs Wheel design allows for up to 6 filters of 50mm square size to be user installed. The 50mm square filters are not available from Optec but are commonly available from other astronomical filter suppliers. Wheel can easily be inserted into the filter wheel selector without removing anything from the instrument train. Tab and spacer kit #17585 is included. This configuration requires the Rear 3" Cover plate #17367 and the Telescope Adapter for 3" #17368.	\$345.00
<u>17363</u>	<b>9-position Filter Wheel for 50mm Round Filters with mounting tabs</b> Wheel design allows for up to 9 filters of 50mm round size to be user installed. Optec has a complete selection of 50mm round filters. Wheel can easily be inserted into the filter wheel selector without removing anything from the instrument train. Two tab and spacer kit #17581 are included. Order Rear 2" Cover plate #17366 and the Telescope Adapter for 2" #17369 separately.	\$345.00
Tab & Spa	cer Kits for IFW Filter Wheels	
<u>17580</u>	Tab and Spacer Kit for Eight 25.4mm round filters Includes: 24 tabs, 8 spacers 0.75mm thk., 8 spacers 1.5mm thk. and 24 stainless 4-40 pan head screws.	\$20.00
<u>17581</u>	<b>Tab and Spacer Kit for Five 50mm round filters</b> Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
<u>17584</u>	<b>Tab and Spacer Kit for Five 2-inch round filters</b> Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
<u>17585</u>	<b>Tab and Spacer Kit for Six 50mm square filters</b> Includes: 24 tabs, 6 spacers 0.75mm thk., 6 spacers 1.5mm thk, and 24 stainless 4-40 pan head screws.	\$20.00
<u>17586</u>	<b>Tab and Spacer Kit for Five 58mm square filters</b> Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
<u>17587</u>	Tab and Spacer Kit for Nine 50mm round filters	\$35.00



Includes: 27 tabs, 9 spacers 0.75mm thk., 9 spacers 1.5mm thk. and 27 stainless 4-40 pan head screws.

MAXfilter	· 2" 3-Position Filter Slider	
17452	<b>3-position filter slider for 50mm filters.</b> Back by popular demand – compatible with the original 3-position MAXfilter system. Tab option not available.	\$95.00
Optical Be	ench Mounts for IFW and IFW-3"	
17582	Optical Bench Mount, Metric mounting plate kit.	\$45.00
17583	Optical Bench Mount, English mounting plate kit.	\$45.00
Camera S	ide Mounting Rings for IFW and MAXfilter	
<u>17460</u>	Universal Mounting Ring for MAXfield/WideField or any 2" barrel accessory. [OPTEC-2380 male thread // 2-inch female barrel mount]	\$60.00
<u>17461</u>	Mounting Ring for TCF-S focuser or any OPTEC-2400 receiver.  [OPTEC-2380 male thread // OPTEC-2400 male dovetail]	\$60.00
<u>17462</u>	Mounting Ring for JMI motorized focuser.	\$60.00
17463	Mounting Ring for SBIG ST-1001E CCD camera. (OBSOLETE only a few units left)	\$60.00
<u>17464</u>	Mounting Ring with short SCT (2"x 24tpi) male thread. Intended for use with certain Apogee cameras.	\$60.00
17465	Mounting Ring with T-Mount (M42x0.75mm) male thread.	\$60.00
17466	Mounting Ring for C-mount cameras.	\$60.00
<u>17467</u>	Mounting Ring with long SCT (2"x 24tpi) male thread.  Intended to fit Visual Back accessories.	\$60.00
<u>17468</u>	Mounting Ring with Pentax (M42x1mm) male thread.	\$60.00
<u>17469</u>	Blank OPTEC-2300 receiver Mounting Ring for IFW.	\$45.00
17760	Reverse mounting ring: OPTEC-3000 male dovetail to OPTEC-2380 male thread for IFW.	\$85.00
<u>17761</u>	Reverse mounting ring: 2-inch nosepiece to OPTEC-2380 male thread for IFW.	\$75.00
17765	Mounting Ring to male M65x1mm threaded interface.	\$60.00
IFW 3" T	elescope Side Front Cover Plates	
<u>17368</u>	IFW-3" Front Cover Plate to OPTEC-3600 Mount (for 3-inch Telescope Adapters)  This adapter bolts directly to the IFW-3" telescope side and should be specified for the 5 and 6-position wheels (#17361 and #17362). Accepts the OPTEC-3600 male dovetail telescope mounts listed on page 7.  [OPTEC-3600 female dovetail // special 4-bolt mount for IFW 3-inch]	\$75.00
<u>17369</u>	IFW-3" Front Cover Plate for OPTEC-2400 Mount (for 2-inch Telescope Adapters)  This adapter bolts directly to the IFW-3" telescope side and should be specified for the 9-position wheels (#17363). Accepts the OPTEC-2400 male dovetail telescope mounts listed on page 7.  [OPTEC-2400 female dovetail // special 4-bolt mount for IFW 3-inch]	\$75.00
IFW 3" C	amera Side Rear Cover Plates	
<u>17366</u>	IFW-3" Rear Cover Plate for 2" Accessories – 2-inch clear aperture.	\$85.00
	This adapter bolts directly to the IFW-3" camera (motor) side and can be flipped 180 degrees to center either the 9-position (#17363) or the 5 and 6-position (#17361 and #17362) filter wheels. Accepts the original IFW 2-inch camera side mounting rings.	
	[special 4-hole mount for IFW 3-inch // OPTEC-2380 female thread]	
<u>17367</u>	IFW-3" Rear Cover Plate for 3" Accessories – 3-inch clear aperture.	\$85.00
	This adapter bolts directly to the IFW-3" camera (motor) side and can be flipped 180 degrees to center either the 9-position (#7363) or the 5 and 6-position (#17361 and #17362) filter wheels. Accepts the 3-inch drawtube adapters listed on page 10. [special 4-hole mount for IFW 3-inch // OPTEC-3000 female dovetail]	



# TELECOMPRESSOR LENS SYSTEMS

NextGEN :	2-inch Series Focal Reducer/Telecompressors	
17403	NextGEN MAXfield NGM 0.33X Telecompressor Lens	\$325.00
17405	Second generation MAXfield telecompressor design with 0.33X reduction. Complete redesign of Optec's premier f/3.3 reducer provides better color correction and a longer back-focus distance. Excellent choice for smaller sensors up to 11mm diagonal. (NOTE: Order NextGEN CCD camera mounting plate separately below.)  [2-inch male barrel mount // OPTEC-2100 male dovetail]	ψ323.00
17409	NextGEN Ultra WideField 0.70X Telecompressor Lens	\$325.00
	Parfocal 0.7X reduction telecompressor specifically designed to work with Apochromatic designs such as the Takahashi FS-series, Astrophysics', and other high-end refractors. Four-element optical system delivers a flat field up to 18mm diagonal for CCD detectors. (NOTE: Order NextGEN CCD camera mounting plate separately above.) [2-inch male barrel mount // OPTEC-2100 male dovetail]	
NextGEN	2" Camera Mounting Plates	
Trem GET (	These mounting plates fit the male OPTEC-2100 dovetail (2.1" diameter) on the camera side of the NGM, NGW, and NGUW NextGEN telecompressor lens systems. The tube length (-X below in inches) for each mount is cut to match the proper backfocus for a particular camera/filter wheel combination. For the most current compatibility list, consult the Optec website.	
17392-X	T-thread mounting plate.	\$60.00
	2" NextGEN Telecompressor to T-thread camera mounting plate. Select best camera mount from Optec website. [OPTEC-2100 female // T-thread 42x 0.75mm male thread]	
<u>17395-X</u>	Pentax thread mounting plate.	\$60.00
	2" NextGEN Telecompressor to Pentax-thread camera mounting plate. Select best camera mount from Optec website. [OPTEC-2100 female // Pentax 42x 1mm male thread]	
<u>17396-X</u>	SCT-thread mounting plate.	\$60.00
15205	2" NextGEN Telecompressor to SCT-thread camera mounting plate. Select best camera mount from Optec website.  [OPTEC-2100 female // SCT 2-inch 24tpi male thread]	<b>#</b> 00.00
<u>17397</u>	QSI 500wsg mount.	\$90.00
17209 V	Replacement 4-bolt mount for QSI 500wsg faceplate to allow close mounting of NextGEN series telecompressor. Maintains 50mm back-spacing required for NextGen telecompressor.  SBIG STL / QSI 2.156"x24tpi threaded mounting plate.	\$60.00
<u>17398-X</u>	New camera mounting plate for the 2.156"x24tpi thread mount allowing more light through than traditional SCT mounts. Used in	φυυ.υυ
	some SBIG and QSI cameras. [OPTEC-2100 female // SBIG 2.156 x 24tpi male thread]	
17399-X	C-thread mounting plate.	\$60.00
	2" NextGEN Telecompressor to C-thread camera mounting plate. Select best camera mount from Optec website. [OPTEC-2100 female // C-thread 1-inch x 32tpi male thread]	
Next Gene	eration Corrector 2-inch Series	
<u>19472</u>	NGC214 Reducer/Corrector for Classic Celestron C-14 SCT	\$295.00
	New corrector and reducer for the classic C-14. 2-inch optics fit into any 2-inch focuser. Optical back-focus distance of 75mm on-axis should be maintained for best performance. Camera side mount is 2.156" STL thread. Camera adapter sold separately. [2-inch male barrel mount // 2.156"x24tpi STL male thread]	
Camera M	ounting Plates for NGC214 and Lepus-STL	
19492-X	Camera mounts to fit NGC214 and Lepus-STL telecompressor/focal reducers. STL threaded camera mount to T-thread. Specify camera mount length to match desired back-focus distance. [Female 2.156"x24tpi STL thread // Male M42x0.75mm T-thread]	\$65.00
2-inch Receiver for 2" Telecompressors		
17401	2" SCT Receiver to accept NextGEN Telecompressors.	\$60.00
17 101	2" 24tpi female threads fit any standard SCT male threads and present a 2" I.D. port for accepting NGM, NGW, NGUW or any 2" evening or push fit acceptony. 10" SCT thread female — 2 inch ID female.	430.00



eyepiece or push-fit accessory. [2" SCT thread female – 2-inch ID female]

Lepus Tele	ecompressor Series	
19405	Lepus-STL 0.62X Telecompressor Focal Reducer Lens	\$225.00
19.00	4-element telecompressor for use with new well-corrected SCT designs including the Meade ACF optical tube assemblies. With a longer back-focus over 100mm, the Lepus 0.62X is capable of fully illuminating a 22mm diagonal CCD. Can be used with any filter wheel/camera combinations with room to spare and can also be used with DSLR cameras.  [2-inch male barrel mount // QSI/STL 2.156"x 24tpi male thread]	
19406	Lepus-ACF 0.62X Telecompress Focal Reducer Lens	\$225.00
17400	Special version Lepus telecompressor allowing direct attachment to Meade ACF rear-cell 2-inch SCT thread. Order Lepus camera mount separately below.  [Meade 2-inch SCT female thread // OPTEC-2100 male dovetail]	Ψ223.00
<u>19407</u>	Lepus 0.62X Telecompressor Focal Reducer Lens	\$199.00
<u>19409</u>	Lepus HD Telecompressor - C8 EdgeHD edition  Lepus 0.62X Telecompressor lens system mounted in 2"x24tpi threaded mount for direct attachment to Celestron 8" EdgeHD SCT. Close coupled mount provides optimal image quality by maintaining a minimum distance between EdgeHD corrector optics and Lepus telecompressor lens grouping. The back-focus distance is reduced to 100mm on-axis and maintained by a camera specific mount (order Lepus camera mount separately below). Contact Optec for cameras not listed.  [Celestron 2"x24tpi female thread mount // OPTEC-2100 male dovetail]	\$225.00
19410	Lepus HD Telecompressor – C9.25 EdgeHD edition	\$275.00
19411	Lepus HD Telecompressor – C11 EdgeHD edition	\$275.00
19414	Lepus HD Telecompressor – C14 EdgeHD edition	\$275.00
	Lepus 0.62X Telecompressor lens system mounted in 3-1/4"x24tpi threaded mount for direct attachment to Celestron 1400 EdgeHD SCT. Two-piece mount includes lens holder and orange retaining ring. Close coupled mount provides optimal image quality by maintaining a minimum distance between EdgeHD corrector optics and Lepus telecompressor lens grouping. The back-focus distance is reduced to 100mm on-axis and maintained by a camera specific mount (order Lepus camera mount separately below). Contact Optec for cameras not listed.  [Celestron 3-1/4"x24tpi female thread mount // OPTEC-2100 male dovetail]	
19415	Conversion of existing Lepus telecompressor to Lepus HD series	\$95.00
	Converts an existing 2-inch barrel mount Lepus telecompressor to the Lepus HD telecompressor. User must return existing barrel mount to Optec for removal, cleaning, and installation of the lens set into any one of the EdgeHD edition mounts. Customer's EdgeHD model must be specified. Lepus camera mounts are fully compatible and need not be returned for the conversion. Contact Optec prior to return.	
Lepus Seri	es Camera Mounting Plates	
1	These mounting plates fit onto the male Optec-2100 dovetail (2.1" diameter) on the camera side of the Lepus telecompressor lens system. The tube length of each mount is cut to match the proper back-focus for a particular camera/filter wheel combination. The value of <i>X below is the length of the tube in millimeters</i> .	
19389-X	M54 x 0.75mm mounting plate for Lepus.	\$60.00
<u>19392-X</u>	T-thread mounting plate.	\$60.00
	2" NextGEN Telecompressor to T-thread camera mounting plate. Select best camera mount from Optec website.  Add \$35 for Canon, Nikon, or Sony bayonet mount (T-ring).  [OPTEC-2100 female // T-thread 42x 0.75mm male thread]	
19394-X	M48 x 0.75mm mounting plate.	\$60.00
1020 C W	2" NextGEN Telecompressor to SCT-thread camera mounting plate. Select best camera mount from Optec website.  [OPTEC-2100 female // M48 x 0.75mm filter thread]	¢<0.00
<u>19396-X</u>	SCT-thread mounting plate. 2" NextGEN Telecompressor to SCT-thread camera mounting plate. Select best camera mount from Optec website.	\$60.00
	[OPTEC-2100 female // SCT 2-inch 24tpi male thread]	
<u>19398-X</u>	SBIG STL /QSI 2.156 x 24tpi threaded mounting plate.  2" NextGEN Telecompressor to SCT-thread camera mounting plate. Select best camera mount from Optec website.	\$60.00
	[OPTEC-2100 female // SBIG 2.156 X 24tpi male thread]	
19399-X	C-thread mounting plate.	\$60.00
40.402.77	2" NextGEN Telecompressor to C-thread camera mounting plate. Select best camera mount from Optec website.  [OPTEC-2100 female // C-thread 1-inch 32tpi male thread]	Φ.C. 0.0
19492-X	STL Threaded mounting plate for T-thread cameras.	\$65.00
	Camera Mounting Plate for NGC214 and Lepus-STL telecompressors. Specify camera for best mounting plate length. [2.156"x24tpi female thread // M42x1mm male T-thread]	
19494	Retainer with OPTEC-3600 mounting dovetail	65.00



VLC - Var	iable Length Camera Adapters for NextGEN, NGC, and Lepus Telecompressors	
19387	25mm Extension for VLC #19395 and #19397 – specify base type.	\$45.00
19388	50mm Extension for VLC #19395 and #19397 – specify base type.	\$45.00
19390	Variable T-thread Adapter for NextGEN and Lepus telecompressors.	\$95.00
	New variable length camera adapter fits OPTEC-2100 2.1" dovetail of the NextGEN and Lepus telecompressor and presents a male T-thread for camera attachment. Back-focus distance is variable from 25mm to 40mm with precision engraved scale and lock nut.	
	[OPTEC-2100 female // T-thread 42x 0.75mm male thread]	
19393	Variable STL-thread Adapter for NextGEN and Lepus telecompressors.	\$95.00
	New variable length camera adapter fits OPTEC-2100 2.1" dovetail of the NextGEN and Lepus telecompressor and presents a male STL-thread for camera attachment. Back-focus distance is variable from 25mm to 40mm with precision engraved scale and lock nut.	
10205	[OPTEC-2100 female // STL-thread 2.156"x24tpi male thread]	ΦΩ <i>ξ</i> . ΩΩ
19395	Variable T-thread Adapter for NGC and Lepus-STL telecompressors.	\$95.00
	New variable length camera adapter fits male STL thread of the NGC and Lepus-STL telecompressor and presents a male T-thread for camera attachment. Back-focus distance is variable from 25mm to 40mm with precision engraved scale and lock nut. [STL 2.156"x24tpi female // T-thread 42x 0.75mm male thread]	
19397	Variable STL-thread Adapter for NGC and Lepus-STL telecompressors.	\$95.00
	New variable length camera adapter fits male STL thread of the NGC and Lepus-STL telecompressor and presents a male STL thread for camera attachment. Back-focus distance is variable from 25mm to 40mm with precision engraved scale and lock nut. [STL 2.156"x24tpi female // STL 2.156"x24tpi male thread]	
Next Gen	eration Corrector 3-inch Series	
19480	NGC316 Corrector/Reducer 0.75X Lens – GENERATION 2	\$795.00
	Second Generation design 3" diameter telecompressor / corrector specifically designed for the Meade 16-inch Classic Schmidt-Cassegrain Telescope. The NGC 316 Generation 2 corrects edge of field stars to 35mm diagonal while flattening and reducing the focal ratio to f/7.5. Second Generation design eliminates ghost image present in original design with certain cameras. Ideal for use with large format CCD cameras. Includes one NGC camera mounting plate (specify below). Requires a 3" receiver or true 3-inch bore focuser such as the TCF-S3 (stk# 17677) or TCF-S3i (stk# 17676).  [3-inch male barrel mount // OPTEC-3100 male dovetail]	
<u>19481</u>	NGC316 Corrector/Reducer upgrade to GENERATION 2	\$300.00
	Upgrade from first generation NGC316 lens set to Generation 2 lens set. Requires return and re-use of elements A and B with new elements C and D along with new brass spacer set. Contact Optec prior to return of original telecompressor.	
Next Gene	eration Corrector 3-inch Series Camera Mounting Plates	
	These mounting plates fit onto the male OPTEC-3100 dovetail (3.1" diameter) on the camera side of the NGC 316 telecompressor lens system. The tube length (-X below in inches) for each mount is cut to match the proper back-focus for a particular camera/filter wheel combination. For the most current compatibility list, consult the Optec web.	
<u>17482-X</u>	T-thread mounting plate.	\$95.00
1740 C W	3" NextGEN Telecompressor to T-thread camera mounting plate. Select best camera mount from Optec website.  [OPTEC-3100 female // T-thread 42x 0.75mm male thread]	¢05.00
<u>17486-X</u>	SCT-thread mounting plate. 3" NextGEN Telecompressor to SCT-thread camera mounting plate. Select best camera mount from Optec website.	\$95.00
	[OPTEC-3100 female // SCT 2-inch 24tpi male thread]	
<u>17487-X</u>	Digital SLR Bayonet mounting plate.	\$125.00
15 100 Y	3" NextGEN Telecompressor to T-thread camera mounting plate with DSLR bayonet.  [OPTEC-3100 female // T-threaded bayonet mount]	Φ0 <b>7</b> .00
<u>17488-X</u>	SBIG STL / QSI 2.156" x 24tpi camera mount ing plate.	\$95.00
17490 V	3" NextGEN Telecompressor to SBIG STL camera mounting plate. [OPTEC-3100 female // SBIG STL 4-bolt mount]  3.000-24tpi threaded mounting plate.	\$05.00
<u>17489-X</u>	3" NextGEN Telecompressor to 3x24tpi -threaded camera mounting plate. Select best camera mount from Optec website. [OPTEC-3100 female // 3x24tpi thread mount]	\$95.00
3-inch Receiver for 3" Telecompressors		
<u>17481</u>	3" Receiver Tube to accept NGC 316 f/7.5 Reducer / Corrector.  [OPTEC-3600 female // 3-inch female barrel mount]	\$95.00



when ordering.

LIBRA DOVETAIL MOUNTING SYSTI
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<u>19230</u>	Libra Alt-Azimuth Adjusting Base.	\$495.00
<u>19235</u>	Heavy duty mounting platform for tandem and top-mounted OTA's. Manual altitude and azimuth controls with locking nuts. Very simple adjustment for co-aligning two telescope OTA's. Female to male Losmandy D-style dovetails.  Libra Systems - Keller EZ-Saddle	\$325.00
	Specify mount type for correct hardware kit – included in price. Supported mounts include: Celestron CGE Pro, Astro-Physics AP900, AP1200, AP1600, AP3600, Mach 1, SB3622, MI-250, Losmandy G11, Takahashi EM-400, Paramount ME Versaplate, PlaneWave Ascension A200 mount.	
19234	Universal Male D-plate dovetail base for EZ-Saddle.	\$55.00
	Male D-plate attaches to bottom of EZ-Saddle for universal fit to most saddles including Paramount MX, MX+, and MyT mount.	
19236	EZ-Saddle Adapter and Bolt kit for Celestron CGEM mount	\$75.00

# ELECTRO-LUMINESCENT FLAT FIELD DEVICES

Field Field	ding CCD Calibration Panels from Alnitak AstroSystems	
19050	Alnitak Flip-Flat flat fielder and dust cover for 4" to 6" OTA.	\$535.00
19051	Alnitak Flip-Flat flat fielder and dust cover for 6" to 7-5/8" OTA.	\$525.00
19052	Alnitak Flip-Flat flat fielder and dust cover for OTA up to 8-1/8" diameter.	\$575.00
	Note: Alnitak Flip-Flat fully illuminated lamp of 6.7" diameter for each model above.	
<u>19055</u>	Alnitak Flat-Man flat fielder for OTA up to 7-5/8" diameter.	\$350.00
19056	Alnitak Flat-Man flat fielder for OTA up to 8-1/8" diameter.	\$375.00
<u>19058</u>	Alnitak Flat-Man L flat fielder for OTA up to 14" diameter.	\$595.00
	Alnitak Flat-Man L has a fully illuminated lamp of 13" diameter and is recommended for telescopes with objectives up to 12.5".	
19091	Tripod and wall mounting bracket for Flat-Man L flat fielder.	\$65.00
	Includes mountable angle bracket machined to fit the Flat-Man L with 1/4-20 thread for most tripods. Black anodized.	
19071	Alnitak XL-2 large flat-fielder, 18" x 18" for OTA's up to 17-inch diameter.	\$1,595.00
19072	Alnitak XL-2 large flat-fielder, 24" x 24"	\$1,895.00
19073	Alnitak XL-2 large flat-fielder, 30" x 30"	\$2,795.00
19516	Replacement Alnitak XL-2 Lamp Cable.	\$75.00
19518	Replacement Alnitak XL-2 Communications Cable.	\$65.00
Alnitak Bo	uhtinov Mask and Remote Dust Cover	
19070	Flip-Mask with Bahtinov mask.	\$495.00
	Specify OTA size for Bahtinov mask. Includes motorized arm, mask, USB cable, mounting straps, and control software.	
<u>19075</u>	Remote Dust Cover.	\$395.00
	Includes lightweight polypro dust cover, motorized arm, mounting straps, USB cable and control software.	
	Some limitations to cover size and telescope orientation may apply. Specify OTA nominal and desired dust cover outer diameter	



## TELESCOPE ADAPTERS

## **OPTEC-2400 Dovetail Mounts**

	Telescope Adapter to OPTEC-2400 Male	
	These telescope mounts fit various scopes and present the Optec-2400 Dovetail Mount (2.4" diameter) for attaching the original	
17116	2-inch IFW Filter Selector or TCF-S Focuser.	Φ.C. 0.0
<u>17416</u>	Universal OPTEC-2400 mount.	\$65.00
<u>17417</u>	PlaneWave CDK 12.5 mount to OPTEC-2400 dovetail adapter.	\$95.00
<u>17418</u>	PlaneWave CDK 14/17/20/24" mount to OPTEC-2400 dovetail adapter.	\$95.00
<u>17419</u>	Female AP2.7 thread to OPTEC-2400 dovetail adapter.	\$75.00
15151	Fits male Astro-Physics 2.7" thread – see AP 2.7 x 24tpi Threaded Adapters and Extensions below.	****
<u>17451</u>	Takahashi 63mm Sky 90 Mount to OPTEC-2400 dovetail adapter.	\$85.00
15.51	This mount fits the Takahashi Sky 90 telescope drawtube with TKP35001 coupling removed.	<b> ↑○ ▼ ○</b> ○
<u>17651</u>	Takahashi 72mm Mount to OPTEC-2400.	\$85.00
15.50	This mount fits the Takahashi M72x1mm Male thread on certain Mewlon telescopes – see website for details.	*° = °°
<u>17652</u>	TeleVue 3" male threaded mount for NP101 to OPTEC-2400 dovetail adapter.	\$95.00
<u>17453</u>	Takahashi 72mm Mount to OPTEC-2400 dovetail adapter.	\$95.00
	This mount fits the Takahashi M72x1mm female thread on many Takahashi telescopes – see website for details.	
<u>17454</u>	Meade/Celestron Mount for 2" Rear Cell Thread, Meade/Celestron 8", Celestron 9.25" telescopes	\$65.00
<u>17455</u>	Meade Telescope Mount for 3" Rear Cell Thread, Meade 10", 12" and 14" telescopes.	\$75.00
<u>17456</u>	Meade Telescope Mount for 4" Rear Cell Thread, Meade 16" telescopes.	\$95.00
<u>17457</u>	Celestron Telescope Mount for 3" Rear Cell Thread, Celestron C-11/C-14 telescopes.	\$75.00
<u>17458</u>	AstroPhysics 2.7" male threaded mount to OPTEC-2400 dovetail.	\$85.00
<u>17459</u>	2" Barrel Mount (male) to OPTEC-2400 dovetail.	\$75.00
<u>17653</u>	½" Extender for OPTEC-2400 dovetail mounts, female to male.	\$60.00
<u>17655</u>	1" Extender for OPTEC-2400 dovetail mounts, female to male.	\$65.00
<u>17656</u>	Takahashi FS-78 mount, fits the 2.2-inch thread directly to OPTEC-2400 dovetail adapter.	\$65.00
<u>17962</u>	OPTEC-2400 dovetail to Apogee 2.5" X 20tpi threaded mount.	\$75.00
<u>19650</u>	T-thread receiver to OPTEC-2400 mount.	\$45.00
	This adapter features a female T-thread (M42x0.75mm) for inserting a male T-thread lens in front of the IFW.	
<u>19652</u>	C-thread receiver to OPTEC-2400 mount.	\$45.00
	This adapter features a female C-thread for inserting a male C-mount lens in front of the IFW.	
19658	M82 x 1mm to OPTEC-2400 mount.	\$75.00
19659	SkyWatcher M74 x 1mm thread to OPTEC-2400 mount.	\$75.00
<u>19661</u>	Vixen VMC260 to OPTEC-2400 mount.	\$65.00
<u>19662</u>	Televue NP101is to OPTEC-2400 mount.	\$75.00
<u>19663</u>	M90 x 1mm to OPTEC-2400 mount for AT6RC and AT8RC.	\$75.00
<u>19665</u>	M117 x 1mm to OPTEC-2400 mount for AT10RC.	\$95.00
19666	Stellarvue thread to OPTEC-2400 dovetail mount.	\$75.00
<u>19667</u>	Intes MCT-180/MK-69 to OPTEC-2400 mount.	\$65.00
19668	William Optics WO98FLT to OPTEC-2400 mount.	\$65.00
	OPTEC-2400 Female Dovetail Receiver Adapters	
	These female adapters receive the OPTEC-2400 male dovetail mounts for special situations and conversions.	
<u>17658</u>	AstroPhysics 2.7" female threaded mount to OPTEC-2400 dovetail.	\$75.00
<u>17659</u>	Standard mountable receiver, OPTEC-2400 female receiver.	\$75.00



## OPTEC-3600 Dovetail Mounts

	Telescope Adapter to OPTEC-3600 Male	
	These telescope mounts fit various scopes for any device with an OPTEC-3600 dovetail receiver. (includes the TCF-S3, IFW-3, Pyxis-3", Perseus 4-port instrument selector)	
17798	OPTEC-3600 dovetail extension, 12.5mm length.	\$75.00
17799	OPTEC-3600 dovetail extension, 25mm length.	\$75.00
17800	Standard mount blank, OPTEC-3600 male dovetail. Plate can be drilled and machined.	\$95.00
17801	Meade16" LX200 Telescope Mount for 4" Rear Cell Thread to OPTEC-3600 dovetail adapter.	\$95.00
17802	Meade Telescope Mount for 3" Rear Cell Thread to OPTEC-3600 dovetail adapter.	\$95.00
17803	Celestron Telescope Mount for 3" Rear Cell Thread to OPTEC-3600 dovetail adapter.	\$95.00
17808	AstroPhysics 2.7" mount to OPTEC-3600 adapter. IMPROVED! Now only uses 1/10" back focus.	\$95.00
17809	Takahashi 2.8" (72mm) mount to OPTEC-3600 dovetail adapter.	\$95.00
	Mounts to FS-102/128/152 with TKP27113 89mm adapter ring, TOA-130/150 with TKP31003 coupling(W) and Mewlon 300.	
<u>17810</u>	AstroPhysics 4.87-inch threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17812</u>	Starlight 3.5 inch focuser model 3545 mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17814</u>	TMB 4.3-inch thread mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17815</u>	AstroPhysics 4.3-inch I.D. mount to OPTEC-3600. IMPROVED! Now only uses 1/10" back focus.	\$95.00
<u>17817</u>	PlaneWave CDK 12.5 mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17818</u>	PlaneWave CDK 14/17/20/24" mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17819</u>	Vixen VMC260 telescope mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17820</u>	FLI PDF 4-inch V-groove to OPTEC-3600 dovetail adapter.	\$95.00
<u>17821</u>	VSI SideWinder 2.9-inch dovetail mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17822</u>	Ceravolo CDK 5-inch mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17823</u>	RC Optical 4.75" x 24tpi threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17824</u>	Meade RCX 3-inch threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17825</u>	Takahashi 89mm threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
<u>17826</u>	PlaneWave 12.5" SecureFit to OPTEC-3600 dovetail adapter.	\$95.00
<u>17827</u>	PlaneWave 12.5" Low Profile to OPTEC-3600 dovetail adapter.	\$95.00
<u>17828</u>	PlaneWave 14/17/20/24" Low Profile to OPTEC-3600 dovetail adapter.	\$95.00
<u>17829</u>	Meade / Celestron 2" 24tpi thread (SCT thread) to OPTEC-3600 dovetail adapter.	\$95.00
<u>19801</u>	M90x1mm thread to OPTEC-3600 dovetail adapter.	\$95.00
<u>19802</u>	DSI 3.5x24tpi (male) thread to OPTEC-3600 dovetail adapter.	\$95.00
19803	OGS 12.5-inch to OPTEC-3600 dovetail adapter.	\$95.00
<u>19804</u>	M117x1mm thread to OPTEC-3600 dovetail adapter.	\$95.00
19805	FLI Atlas zero-tilt adapter to OPTEC-3600 dovetail adapter.	\$95.00
19806	Takahashi M92x1mm to OPTEC-3600 dovetail adapter.	\$95.00
<u>19807</u>	Takahashi M98x1mm to OPTEC-3600 dovetail adapter.	\$95.00
10000	Fits TOA 4-inch drawtube and replaces CAA (TPF1106). Order #17840 with Pyxis 3" for drop-in replacement.	φο <i>τ</i> οο
19808 10800	Takahashi M114x1mm to OPTEC 3600 dovetail adapter.	\$95.00
19809 10810	Takahashi M125x1mm to OPTEC-3600 dovetail adapter.	\$95.00
19810 10811	RCOS FIA100 to OPTEC-3600 dovetail adapter.	\$95.00
19811 10812	NP127is to OPTEC-3600 dovetail adapter.  Takabashi M82 v 1mm thread to OPTEC 3600 dovetail adapter.	\$95.00 \$95.00
19812	Takahashi M82 x 1mm thread to OPTEC-3600 dovetail adapter.	
19813	Takahashi Epsilon M108 x 1mm thread to OPTEC-3600 dovetail adapter.	\$95.00



(	OPTEC-3600 Female Dovetail Receiver Adapters	
	These female adapters receive the OPTEC-3600 male dovetail mounts for special situations and conversions.	
<u>17858</u>	OPTEC-3600 dovetail to AstroPhysics 2.7" female threaded adapter.	\$95.00
	Adapts any OPTEC-3600 male dovetail mount to the AstroPhysics 2.7" female thread.	
<u>17879</u>	Standard mountable receiver, OPTEC-3600 female receiver.	\$95.00
	Includes 4 bolt patterns or can be drilled as necessary to adapter many devices to OPTEC-3600 dovetail.	
<u>17880</u>	OPTEC-3600 dovetail receiver to female 3-inch receiver (fits Perseus Port 1).	\$75.00
OPTEC-	4300 4.3-inch Dovetail Mount and Camera Adapters	
17870	OPTEC-3600 expansion adapter to OPTEC-4300 standard dovetail.	\$55.00
	Expansion collar allows use of any standard OPTEC-3600 male dovetail mount to fit the Gemini or TCF-S3 Low-Profile focusers.	
19829	OPTEC-4300 extension adapter, 12.5mm length.	\$75.00
	Short extension tube, female to male OPTEC-4300 dovetail adapter.	
19830	Male OPTEC-4300 to Optec-DSI 3.5x24tpi female threaded receiver.	\$125.00
	Male OPTEC-4300 dovetail mount reduces to female DSI 3.5" threaded mount. Designed for use with the Gemini Focusing Rotator on the camera side to accept any Optec-DSI spacer combination.	
19831	Male Optec-DSI 3.5x24tpi thread adapter to OPTEC-4300 standard dovetail.	\$125.00
	Male DSI 3.5 adapter can be used as a telescope side adapter for the Gemini Focusing Rotator. Optec-DSI spacers can be use between the OTA and Gemini with suitable telescope to Optec-DSI adapter below.	
19832	Female OPTEC-4300 to female Optec-DSI 3.5x24tpi threaded receiver.	\$125.00
19833	Male OPTEC-4300 to 3-inch receiver for OPTEC-3000 drawtube adapters.	\$125.00
19834	Male OPTEC-4300 to Astro-Physics AP2.7 female threaded receiver.	\$125.00
19835	Meade 16-inch to OPTEC-4300 male dovetail mount.	\$125.00
19836	Meade 10", 12", 14" OTA with 3-1/4" thread to OPTEC-4300 male dovetail mount.	\$125.00
19837	AstroPhysics Riccardi-Honders Astrograph to OPTEC-4300 male dovetail mount.	\$125.00
19838	Celestron C11/C14 large 3.25" thread to OPTEC-4300 male dovetail mount.	\$125.00
19839	OPTEC-4300 extension adapter, 25mm length.	\$85.00
	Recommended spacer between telescope and Gemini for Celestron EdgeHD and other OTAs.	
19840	Ceravolo CDK to OPTEC-4300 male dovetail mount.	\$125.00
19841	M117x1mm to OPTEC-4300 male dovetail mount.	\$125.00
19842	PlaneWave focuser lock ring (pinch plate) mount to OPTEC-4300 male dovetail mount.	\$125.00
19843	Takahashi Epsilon 180 to OPTEC-4300 male dovetail mount.	\$125.00
	Fits Epsilon 180 male M108 thread under captains wheel to allow direct replacement of native focuser with Gemini focusing rotator. Order with #19844 for complete focuser replacement solution.	
19844	OPTEC-4300 male dovetail mount to Takahashi Epsilon reducer / corrector lens.  New Design with adjustable receiver for Epsilon-180 fits directly into Gemini drawtube receiver while accepting E180 flattener /	\$125.00
	corrector lens. Adjustable to set proper spacing of corrector to primary. The Takahashi corrector design back-focus distance to image plane is maintained. Order with #19843 above for complete solution.	
19845	OPTEC-4300 male dovetail mount to male OPTEC-3600 mount.	\$125.00
19846	OPTEC-4300 to internal 3-inch clamp.	\$150.00
	OPTEC-4300 to internal 3-inch clamp to allows tight fit of Paracorr, Wynne Correctors, and other 3-inch optics for the Gemini Focusing Rotator. Adjustable placement of lens inside Gemini drawtube allows ideal spacing of corrector / flattener optics to primary mirror.	

For additional Gemini camera side adapters, see also Optec-DSI 3.5 x 24tpi Threaded Adapters.



# **CAMERA SIDE ADAPTERS**

2-inch Dro	awtube Adapters for TCF 2-inch Focusers. Also known as nosepiece adapters.	
17662	2-inch to 11/4" adapter fits directly into the 2" TCF focuser.	\$45.00
17663	2-inch to 11/4" compression adapter fits directly into the 2" TCF focuser.	\$65.00
	Includes quick-release locking ring and brass compression ring for 11/4" eyepieces. Non-marring!	
17664	2-inch to T-thread adapter fits directly into the 2" TCF focuser.	\$45.00
	[2-inch male barrel mount // T-thread 42x0.75mm male thread]	
<u>17665</u>	2-inch to SCT thread (2" diameter) adapter, fits directly into the 2" TCF focuser.	\$45.00
	[2-inch male barrel mount // SCT 2" x 24tpi male thread]	
<u>17666</u>	2-inch to 3"x 24 tpi male threaded mount.	\$95.00
	Fits Apogee, SBIG and some FLI 3" x 24tpi camera face threads.	
<u>17667</u>	2-inch to STL 2.156"x 24 tpi male threaded mount.	\$45.00
OPTEC-3	000 3-inch Drawtube Adapters for TCF-3, TCF-Leo, Pyxis-3, and IFW-3	
17804	OPTEC-3000 3-inch to 2" reducer bushing with removable compression ring.	\$95.00
	Adapter with three setscrews and brass compression ring for any 2-inch drawtube adapter, eyepiece or diagonal.	
17805	OPTEC-3000 3-inch to OPTEC-2400 male dovetail.	\$85.00
17806	OPTEC-3000 3-inch to STL camera mount.	\$85.00
17807	OPTEC-3000 3-inch to AstroPhysics 2.7" (AP2.7) female threaded mount.	\$85.00
17811	OPTEC-3000 3-inch to OPTEC-3600 mount.	\$85.00
17813	OPTEC-3000 3-inch to Starlight Instruments 4.1x24tpi threaded mount.	\$85.00
17816	OPTEC-3000 3-inch to 3-inch Extender tube	\$65.00
	Extends focusing range from 1.0 to 3.1 inches. Can be easily cut to length while maintaining exceptional rigidity.	
17831	OPTEC-3000 3-inch to FLI PDF 3-3/4" threaded mount.	\$95.00
17832	OPTEC-3000 3-inch to 3.000" 24tpi threaded mount.	\$95.00
17834	OPTEC-3000 3-inch to Takahashi 72mm female thread	\$95.00
17835	OPTEC-3000 3-inch to PlaneWave SecureFit CCD Spacer.	\$95.00
	This adapter can be used with #17826 PlaneWave SecureFit to OPTEC-3600 adapter and the Pyxis 3" rotator to directly	
17026	substitute the PlaneWave 4.8" SecureFit spacer.	Φ0 <b>.5</b> .00
<u>17836</u>	OPTEC 3000 3-inch to Meade 3-1/4" SCT thread.	\$95.00
<u>17837</u>	OPTEC-3000 3-inch to Celestron 3-1/4" SCT thread.	\$95.00
<u>17838</u>	OPTEC-3000 3-inch to AstroPhysics 2.7" male thread.	\$95.00
<u>17839</u>	OPTEC 2000 3-inch to FLI Atlas focuser Zero-Tilt Adapter.	\$95.00
<u>17840</u>	OPTEC 3000 3-inch to Takahashi M98x1mm male thread.	\$95.00
<u>17841</u>	OPTEC 3000 3-inch to STXL 4-bolt adapter.	\$125.00
<u>17842</u>	OPTEC 3000 3-inch to SCT 2"x 24tpi male thread adapter.	\$95.00
<u>17843</u>	OPTEC 3000 3-inch to STL 2.156"x 24tpi male thread adapter.	\$95.00
<u>17844</u>	OPTEC 3000 3-inch to T-thread M42x0.75mm male thread adapter.	\$95.00
17845	OPTEC 2000 3-inch to Innovation Foresight ONAG XM On-Axis Guider.	\$95.00
17846	OPTEC 3000 3-inch to M82 x 1mm female thread adapter.	\$95.00
17847	OPTEC 3000 3-inch to M54 x 0.75mm female thread adapter.	\$95.00
17848	OPTEC-3000 3-inch to M68 x 0.75mm female thread adapter.	\$95.00
10007	Special adapter for TCF-Leo accepts Takahashi Epsilon Field Flattener with correct spacing to primary mirror.	<b>4107</b> 00
<u>19825</u>	OPTEC-3000 3-inch to 2-inch Centering Collet Precision Centering Adapter  Premium receiver for 2-inch diagonals, eyepieces and camera nosepieces. Internal brass ring will not mar accessories while	\$125.00
	machined collet design holds and centers exceptionally well.	



OPTEC	-3000-S Short 3-inch Drawtube Adapters for Sagitta Off-Axis Guider	
17849	OPTEC-3000 standard dovetail to OPTEC-3000-S short male dovetail adapter.	\$95.00
19871	AP 2.7-inch male threaded adapter to OPTEC-3000-S short dovetail.  Included with Sagitta Off-Axis Guider.	\$95.00
19872	<b>OPTEC-3000-S short dovetail adapter to female AP 2.7-inch threaded interface.</b> Included with Sagitta Off-Axis Guider.	\$95.00
19950	OPTEC-3000-S short dovetail to male T-thread - M42 x 0.75mm thread.	\$95.00
19951	OPTEC-3000-S short dovetail to M54 x 0.75mm male thread.	\$95.00
19952	OPTEC-3000-S short dovetail to 2" x 24tpi threaded adapter.	\$95.00
19953	OPTEC-3000-S short dovetail to 3" x 24tpi threaded adapter for many cameras.	\$95.00
19954	OPTEC-3000-S short dovetail to FLI ZTA dovetail for Centerline Filter Wheel.	\$95.00
19955	OPTEC-3000-S short dovetail to FLI M92 x 1mm thread adapter.	\$95.00
19956	OPTEC-3000-S short dovetail to M72x1mm male thread.	\$95.00
19958	OPTEC-3000-S short dovetail to female M48x0.75mm thread.	\$95.00



# THREADED SPACERS AND ADAPTERS

T-thread A	Adapters with M42x0.75mm threads	
19632	7.5mm T-thread Extension Ring.	\$20.00
19633	15mm T-thread Extension Ring.	\$22.00
19634	30mm T-thread Extension Ring.	\$25.00
19636	Canon T2 Bayonet Ring.	\$25.00
19637	Nikon T2 Bayonet Ring.	\$25.00
19850	T-thread to SCT-thread Expansion Ring.	\$35.00
	Expands the M42x0.75mm thread to a male 2"-24tpi thread. Can also be used as male T-thread to male T-thread adapter.	
<u>19851</u>	T-thread to STL expansion ring adapter.	\$65.00
19852	STL knurled locking ring fits 2.156"x24tpi STL male thread.	\$15.00
19853	T- to C-mount adapter, female T-thread to male C-thread.	\$35.00
19854	T-thread (M42x0.75mm) to M65 x1mm expansion ring.	\$55.00
STL threa	d adapters with 2.156" x 24tpi threads.	
19391	STL/QSI thread to T-thread adapter – Low Profile.	\$50.00
	Adapter to convert male QSI/STL thread to male T-thread, 7.2mm back-focus. [2.156"x24 female // M42x0.75mm T-thread male]	
19496-x	STL to SCT 2"x 24tpi adapter.	\$65.00
	Custom STL adapter for standard SCT threads. Converts male STL threads to male SCT threads. Specify length up to 60mm.	
19498-x	STL to STL extension adapter.	\$65.00
	Custom adapter for STL threaded extensions. Specify length up to 60mm.	
$AP 2.7 \times 2$	Atpi Threaded Adapters and Extensions	
	AstroPhysics standard 2.7" x 24tpi threaded adapters and extension tubes.	
17458	Astro-Physics 2.7 thread standard (AP2.7) to OPTEC-2400 dovetail adapter.	\$85.00
19870	M90 x 1mm female thread to AP2.7 Female threaded adapter.	\$75.00
	Converts GSO / AstroTech AT8RC spacer tubes to AP2.7 standard.	
19878	AP2.7 x 24tpi to M54 x 0.75mm thread adapter.	\$75.00
	Fits Atik and other large format cameras with M54 female thread. Includes spacer for shallow thread cameras.	
19879	AP2.7 x 24tpi to T-thread adapter.	\$85.00
	Includes internal thread for Takahashi Collimation Scope. (equivalent to RCOS T-2-AP adapter)	
<u>19880</u>	AP2.7 x 24tpi Extension Tube Set, 4-piece.	\$115.00
	Provides ¼" incremental extensions from ½" to 3-¼" Includes ½", ¾", 1", and 1-½" extensions (#19891 through #19894 below)	
<u>19881</u>	AP2.7 x 24tpi Extension Tube Set, 5-piece.	\$150.00
	Includes ½", ¾", 1", 1- ½", and 3" extensions (#19891 through #19895 below)	
<u>19882</u>	AP2.7 x 24tpi Extension Tube, ½" length.	\$30.00
<u>19883</u>	AP2.7 x 24tpi Extension Tube, ¾" length.	\$30.00
<u>19884</u>	AP2.7 x 24tpi Extension Tube, 1" length.	\$30.00
<u>19885</u>	AP2.7 x 24tpi Extension Tube, 1-1/2" length.	\$30.00
<u>19886</u>	AP2.7 x 24tpi Extension Tube, 3" length.	\$40.00
19887	AP2.7 x 24tpi male to male thread adapter.	\$60.00
<u>19888</u>	AP2.7 knurled female threaded retaining ring.	\$15.00
	Use this locking ring to set the back-focus distances at exactly the distance required. 1/10" thick, Gold anodized.	



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Stanaara 3	Bx24tpi Threaded Adapters  Apogee, SBIG, and other cameras share a common 3.000"x24tpi threaded female interface for their large cameras and filter	
	wheels. These mechanical adapters allow a proper fit to other telescope and camera interfaces i	
17666	2-inch to 3"x 24tpi male threaded mount.	\$95.00
	Also listed in the 2-inch Drawtube Adapters section.	
17832	3-inch to 3"x 24tpi threaded mount.	\$95.00
	Also listed in the 3-inch Drawtube Adapters section.	
<u>19370</u>	3"x 24tpi Male to Male threaded adapter.	\$95.00
	Adapter with male to male 3"x24tpi threads to directly attach Apogee or SBIG cameras to Equuleus tip-tilt adapter.	
19371	3" x 24tpi Male to T-thread adapter.	\$95.00
19372	3" x 24tpi Male to STL 2.156"x24tpi thread adapter.	\$95.00
19373	3"x 24tpi Female to male OPTEC-3600 dovetail mount.	\$95.00
	Also fits Televue NP101is. Same as stock #19811.	
Optec-DSI	3.5x24tpi Threaded Adapters and Extensions	
1	Optec-DSI standard 3-1/2" x 24tpi threaded adapters and extension tubes. Anti-reflection threaded, ultra-flat black painted and	
	baked interior finish with no internal reflections guaranteed.	
<u>19802</u>	Optec-DSI 3.5x24tpi (male) thread to OPTEC-3600 dovetail adapter.	\$95.00
<u>19889</u>	Optec-DSI 3.5x24tpi Extension Tube Set, 4-piece.	\$175.00
	Provides ¼" incremental extensions from ½" to 3-¼" Includes ½", ¾", 1", and 1-½" extensions (#19891 through #19894 below)	
<u>19890</u>	Optec-DSI 3.5x24tpi Extension Tube Set, 5-piece.	\$235.00
10001	Includes ½", ¾", 1", 1-½", and 3" extensions (#19891 through #19895 below)	
<u>19891</u>	Optec-DSI 3.5x24tpi Extension Tube, ½" length.	\$50.00
<u>19892</u>	Optec-DSI 3.5x24tpi Extension Tube, <sup>3</sup> / <sub>4</sub> " length.	\$50.00
<u>19893</u>	Optec-DSI 3.5x24tpi Extension Tube, 1" length.	\$50.00
<u>19894</u>	Optec-DSI 3.5x24tpi Extension Tube, 1-½" length.	\$50.00
<u>19895</u>	Optec-DSI 3.5x24tpi Extension Tube, 3" length.	\$65.00
	Optec-DSI 3.5x24 adapters are typically mounted male end toward telescope. The 3-inch extension tube is baffled	
<u>19896</u>	Optec-DSI 3.5x24tpi (male) to AstroPhysics 2.7" female adapter.	\$65.00
<u>19897</u>	Optec-DSI 3.5x24tpi knurled female threaded retaining ring.	\$25.00
10000	Use this locking ring to set the back-focus distances at exactly the distance required. 1/10" thick, Gold anodized.	<b>***</b> • •
<u>19898</u>	M90x1mm female to Optec-DSI 3.5x24tpi female thread adapter.	\$95.00
<u>19899</u>	M117x1mm female to Optec-DSI 3.5x24tpi female thread adapter.	\$95.00
10007	Converts Astrotech rear cell thread to Optec-DSI 3.5x24tpi thread spec for stronger spacer sets with improved resolution.	ΦΩ <b>Σ</b> ΩΩ
19905	Optec-DSI 3.5x24tpi male thread to 2-inch receiver with brass compression ring.	\$95.00
10010	Accepts 2-inch eyepieces, star diagonal, or 2-inch camera nosepiece.	<b>405.00</b>
19910	Optec-DSI 3.5 x 24tpi male thread to OPTEC-2400 male dovetail adapter.	\$95.00
19911	Optec-DSI 3.5 x 24tpi male thread to M54 x 0.75mm camera thread.	\$95.00
19912	Optec-DSI 3.5 x 24tpi male thread to male T-thread adapter.	\$75.00
19913	Optec-DSI 3.5 x 24tpi male thread to 2" x 24tpi SCT male thread adapter.	\$75.00
19914	Optec-DSI 3.5 x 24tpi male thread to STL 2.156" x 24tpi male thread adapter.	\$75.00
19915	Optec-DSI 3.5 x 24tpi male thread to 3" x 24tpi male thread adapter.	\$75.00
19916	Optec-DSI 3.5 x 24tpi male thread to M92 x 1mm male thread adapter.	\$95.00
19917	Optec-DSI 3.5 x 24tpi male thread to M72 x 1mm male thread adapter.	\$95.00
19918	Optec-DSI 3.5 x 24tpi male thread to M72 x 1mm female thread adapter.	\$95.00
19919	Optec-DSI 3.5 x 24tpi male thread to ONAG XM dovetail adapter.	\$95.00
19920	Optec-DSI 3.5 x 24tpi male thread to PlaneWave SecureFit.	\$95.00
19921	Optec-DSI 3.5 x 24tpi male thread to OPTEC-3000-S short 3-inch dovetail spec.	\$95.00
19961	M95 x 1mm thread (fits TEC Field Flattener) to Optec-DSI 3.5" x 24tpi thread.	\$9500



back. Set of two.

# **COMBINATION CAMERA/TELESCOPE ADAPTERS**

OPTEC-2	2100 Adapters and Accessories for NextGEN, Lepus, and original Pyxis 2" Rotator.  SPECIAL NOTE: The OPTEC-2100 dovetail spec allows direct connection of the NextGEN and Lepus telecompressors to fit the original Pyxis 2" camera rotator. The new Pyxis 2-inch GEN 3 model uses the standard OPTEC-2400 dovetail mounts instead.	
15.01	Optec will continue to supply these adapters for original Pyxis 2" rotator owners as long as items below are requested.	Φ4 <b>5</b> 00
17631	OPTEC-2400 female receiver to OPTEC-2100 male dovetail.	\$45.00
17632	OPTEC-2100 to OPTEC-2400 expansion ring.	\$25.00
17634	OPTEC-2100 receiver to ONAG XT/XM dovetail mount.	\$55.00
	Allows direct connection of Lepus telecompressor to Innovation Foresight On-Axis Guider.	
17635	OPTEC-2100 receiver to Celestron OAG dovetail mount for DSLR.	\$55.00
	Allows direct connection of Lepus telecompressor to Celestron OAG while maintaining standard 55mm back-focus for DSLR.	
17636	OPTEC-2100 receiver to Celestron OAG dovetail mount – Low Profile.	\$55.00
	Lowest profile mount for direct connection of Lepus telecompressor to Celestron OAG.	
17638	AP2.7 male thread to Pyxis telescope side adapter.	\$65.00
17639	2" x 24tpi SCT thread to Pyxis adapter.	\$60.00
	Adapter to allow direct connection of the Pyxis 2-inch rotator to the SCT male thread available on many SCT telescopes. Allows closest connection of the Pyxis 2-inch to SCT telescope. [Female SCT thread // OPTEC-2100 male dovetail]	
17641	T-thread to Pyxis adapter.	\$45.00
	Adapter with female T-thread to fit existing male M42x0.75mm T-thread directly to Pyxis 2-inch using the OPTEC-2100 connection.	
	[Female T-thread // OPTEC-2100 male dovetail]	
17642	Pyxis 2-inch nosepiece replacement.	\$45.00
	The Pyxis is shipped with this adapter to fit any 2-inch ID focusing mount. [2-inch barrel mount // OPTEC-2100 male dovetail] – Limited stock.	
	apters and Threaded Extensions	
<u>19790</u>	Meade-Celestron Adapter – Meade 16" SCT to Celestron 3-1/4" thread.  Unique adapter allows conversion of Meade 16" SCT thread (4" x 16tpi) to Celestron 11/14 SCT thread (3-1/4" x 16tpi) allowing use of various Celestron large format accessories.	\$55.00
19791	CS-mount to C-mount adapter.	\$20.00
-,,,-	5mm long C-thread extension converts CS-mount camera to C-mount back-focus specification.	,
19849	2-inch Filter Cell adapter.	\$20.00
15015	Converter female M48x0.6mm (Celestron and Optec standard) filter threads to M48x0.75mm female thread.	Ψ20.00
Celestron	e EdgeHD Accessories	
19792	Sure-Lock Mirror Support Clutch Knobs for Celestron EdgeHD OTA.  Special Low-Profile replacement lock knob set to allow additional clearance for TCF-Leo on Celestron C14 EdgeHD models and others. These lock knobs are machined from solid 360 alloy brass with heavy knurl for easier locking of the primary mirror.	\$80.00



Easy installation provides an additional 22mm of clearance. Guaranteed to hold better than factory lock knobs or your money

## **OFF-AXIS FOCUS DEVICE**

<u>19860</u>	Lacerta for Lodestar FOAG	\$249.00
	Special tilt-window add-on for the Starlight Xpress Lodestar family of cameras. Works with Lodestar, Lodestar 2, and Ultrastar	
	cameras to allow real-time auto-focus using FocusLock software above.	

#### **SOFTWARE TOOLS**

19676 Optec ASCOM Server \$25.00

ASCOM Local Server tool for any ASCOM device allowing for multiple client connections to single communication device types. License includes one year of free updates to the latest version.

19685 FocusLock Continuous Focus Tool for Off-Axis and On-Axis Guiders. \$100.00

NEW! **FocusLock** provides fast telescope auto-focus and maintains continuous focus while guiding using the ONAG or most any off-axis guider. Using the patented SharpLock Technology, **FocusLock** uses introduced astigmatism on the guide camera to quickly find and maintain best absolute focus regardless of focuser brand or quality. License includes one year of free updates to the latest version.

## **CABLES AND CONVERTERS**

## **USB-to-Serial Converters**

<u>17690</u>	USB to Serial Converter 1-Port.	\$30.00
<u>17691</u>	USB to Serial Converter 4-Port.	\$175.00

Provides 4 serial ports from one USB connection.

#### PC Serial Port Converter

<u>17695</u>	PC Serial Port Converter, DB-9 to RJ-12, for TCF-S Focuser.	\$15.00
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Allows PC serial communications with the TCF-S Focuser and IFW Filter Wheel using any 9-pin serial port. A RJ-12 Reverse Cable is required for proper operation. See stock numbers 17671 through 17674 below.

#### PC Serial Cables for Optec devices

<u>17671</u>	6-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$10.00
<u>17672</u>	12-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$15.00
<u>17673</u>	25-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$25.00
17674	50-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$30.00

#### USB/Serial Cables

Single piece cable in integrated FTDI USB converter.	Uses VCP technology to provide direct USB connection for Optec devices.

<u>19671</u>	6-foot RJ-12 Serial / USB cable with integrated FTDI USB converter.	\$55.00
<u>19672</u>	12-foot RJ-12 Serial / USB cable with integrated FTDI USB converter.	\$60.00
19673	25-foot RJ-12 Serial / USB cable with integrated FTDI USB converter.	\$65.00
19674	50-foot RJ-12 Serial / USB cable with integrated FTDI USB converter.	\$75.00
19681	NEW! USB/Serial cable for Celestron mounts with RJ22 socket, specify length up to 25-ft.	\$60.00
19682	NEW! USB/Serial cable for Meade telescope mounts, specify length up to 25-ft.	\$60.00

### Control Cables for TCF-S and IFW Systems

<u>17470</u>	6-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$30.00
<u>17471</u>	12-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$40.00
<u>17472</u>	25-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$50.00
<u>17473</u>	50-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$60.00



# **POWER AND BATTERY**

Battery an	nd Power Supplies	
17060	9 volt Nickel Hydride battery replacement. Replacement battery for SSP-3 photometer.	\$20.00
17061	Paramount ME/MX power conversion cable.  Converts Paramount locking 2.1x5.5mm power plug to Optec 2.5x5.5mm power plug. Std. length is 20-inches.	\$20.00
17063	Power plug 2.5x5.5mm with 6-ft. leads.  Standard power plug for most Optec devices. Ideal for Powerpole and Rigrunner type projects. Wire plug with the center pin positive for 12VDC nominal voltages. Battery voltages of 13.7VDC will work without problems.	\$15.00
17064	12 VDC Universal Power Supply, input range 100-240VAC 50-60Hz, 1.2 Amp output. For use with most Optec devices. Includes 2.5 x 5.5 power plug. Specify U.S. or European wall plug.	\$25.00
17066	<b>15 VDC Power Supply, 100-240VAC 50-60Hz, 1.5 Amp output.</b> For use with Pyxis 3", 15VDC output includes 2.5 x 5.5mm right angle power plug. Specify U.S. or European wall plug.	\$35.00
17067	6-foot power supply extender cable.	\$20.00
17068	12-foot Cigarette light plug to 2.5x5.5mm power plug for Optec devices.  Rated for 3A with internal fuse protection, LED power indicator, right-angle plug. Specify straight or coiled	\$30.00
17069	Y-splitter Cable for 12 VDC output, 6-ft. length. Includes female 2.5 x 5.5mm socket and two male 2.5 x 5.5mm power plugs.	\$25.00
17070	USB TO 12vdc Power Converter Cable  Recommended for use with 1A or higher USB charger ports to power ThirdLynx focus motors.	\$20.00
17071	Power Plug Converter, 2.1mm to 2.5mm standard. 2.1mm to 2.5mm expansion plug for any Optec device requiring power. Works well with PowerBox and other 2.1mm standard 12VDC sockets.	\$15.00



# REPAIR SERVICES AND REPLACEMENT PARTS

REPAIR	SERVICES AND REPLACEMENT PARTS	
17295	Silica gel desiccant replacement cartridge for SSP Carrying and Storage Cases.	\$12.00
17501	Alignment of SSP detector with reticle.	\$35.00
17503	Replacement of 1mm photodiode, SSP-3.	\$100.00
17505	Replacement of electrometer op-amp, SSP-3.	\$90.00
17507	Cleaning & recoating of detector/electrometer, SSP-3.	\$50.00
17509	Complete detector/electrometer assembly, 1 mm SSP-3.	\$255.00
17511	Repair of SSP digital main board, flat rate.	\$95.00
17513	New SSP digital main board tested and adjusted.	\$315.00
17515	SSP-3/4/5 focusing eyepiece with reticle.	\$95.00
17519	Clean, grease and adjust flip mirror assembly.	\$25.00
17523	SSP-3/3A control board, complete.	\$195.00
17524	SSP-4 control board, complete.	\$225.00
17525	SSP-5/5A control board, complete.	\$225.00
17550	SAA1027 Stepper Driver Chip.	\$16.00
17555	Replacement PMT chamber access port with desiccant, SSP-5.	\$55.00
17556	Repair of SSP-5/5A H/V power supply flat rate.	\$105.00
17557	Replacement gearhead stepper motor for TCF-S focuser, with end cap.	\$175.00
17558	Upgrade temperature probe and socket to 6-pin DIN type.	\$75.00
17560	Replacement temperature probe for TCF/TCF-S/TCF-S3 focuser.	\$40.00
17561	Replace RS232 interface chip, TCF-S focuser, IFW filter wheel, Pyxis rotator or SSP-3/4/5.	\$25.00
17562	Replacement drawtube for TCF-S focuser – include modification of main body if required.	\$125.00
17563	IFW controller board replacement.	\$195.00
17564	IFW hand control box, complete.	\$245.00
17565	TCF-S/TCF-S3 firmware upgrade PIC chip.  Current version for TCF-S/TCF-S3	\$25.00
	(Rev 1 through Rev4 boards) = V2.40 (New!!! Rev 5 board) = V4.11	
	Current version for TCF-Si/TCF-S3i = V3.12	
17566	Stepper driver PIC chip for TCF-S, IFW, or Pyxis.	\$25.00
17567	<b>IFW firmware upgrade PIC chip.</b> Current version for IFW = V2.02	\$25.00
	Current version for IFW 3" = V3.01	
17568	TCF-S/TCF-S3 controller board replacement.	\$195.00
17569	TCF-S/TCF-S3 hand control box, complete.	\$245.00
17570	TCF-Si/TCF-S3i control board replacement.	\$125.00
17572	<b>PYXIS firmware upgrade PIC chip.</b> Current version for Pyxis = V2.05  Current version for Pyxis 3" = V3.43	\$25.00
17573	PYXIS 3-inch controller board replacement.	\$135.00
17574	TCF-Lynx motor board replacement.	\$75.00
17575	IFW filter wheel replacement O-ring, 3-pack. (specify IFW or IFW-3)	\$15.00
17579	Replacement circuit board for the Pyxis 2-inch	\$100.00
17599	Replacement thermo-foam pad for TCF-S temperature sensor.	\$3.00
19521	Replacement circuit board for Alnitak Flip-Flat, Flat-Man, Flat-Man L, Rev. H	\$165.00
19530	Replacement Pyxis LE / HSFW circuit board.	\$125.00
19532	Replacement Focus Lynx circuit board.	\$195.00
94966	Replacement stainless steel thumbscrews, TCF focusers. (specify 2-inch or 3-inch focuser model)	\$20.00

