

ASTRONOMICAL INSTRUMENTS

PRICE LIST

Effective Date: September 30, 2009

NEW! EASY TO ORDER KITS!

SSP-3	SSP-3 B-V Photometer Kit. Typical SSP-3 B-V Photometer Kit Includes: #17003, 17050, 17032, 17033, 17155.	\$1,548.00 \$1,500.00
SSP-3A	SSP-3A UBVR Photometer Kit. Typical SSP-3A UBVR Automated Photometer Kit Includes: #17005, 17052, 17031, 17032, 17033, 17034, 17035, 17036, 17157, 17030, 17210.	\$2,512.00 \$2,500.00
SSP-5A	SSP-5A UBVR Photometer Kit. Typical SSP-5A UBVR Automated Photometer Kit Includes: #17009, 17017, 17052, 17031, 17032, 17033, 17034,, 17036, 17157, 17030, 17215.	\$4,258.00 \$4,250.00
NGM	NextGEN MAXfield 0.33X Telecompressor Kit. Typical NGM MAXfield 0.33X telecompressor configured for the original SBIG ST-7 camera. Kit includes: #17403, 17392-1.43.	\$305.00 \$300.00
NGW	NextGEN WideField 0.5X Telecompressor Kit. Typical NGW WideField 0.5X telecompressor configured for the current model SBIG ST-8/9/10 cameras. Kit includes: #17406, 17392-1.38.	\$335.00 \$325.00
NGUW	NextGEN UltraWidefield 0.7X Parfocal Telecompressor Kit. Typical NGUW NextGEN UltraWidefield 0.7X telecompressor designed for well-corrected telescopes and the current model SBIG ST-8/9/10/2000 cameras. Kit includes: #17409, #17392-1.38.	\$335.00 \$325.00
NGC 316	Next Generation Corrector 3-inch f/7.5 Telecompressor Kit. Typical NGC 316 3-inch Next Generation Corrector f/7.5 telecompressor designed exclusively for classical Schmidt Cassegrain telescopes and SBIG STL cameras. Kit includes: #17480, #17483-2.50 or equivalent.	\$1,345.00 \$1,250.00
IFW	IFW Intelligent Filter Wheel LRGB Kit. Typical IFW 2-inch Filter Selector system designed Meade LX200 10"/12"/14" SCT telescopes with 50mm LRGB filter set and all required cables. Kit includes: #17455, #17350, #17352, #17445, #17465, #17471, #17672, #17695, #17690.	\$1,636.00 \$1,600.00
IFW-3"	IFW-3 Intelligent Filter Wheel LRGB Kit. Typical IFW 3-inch Filter Selector system designed Meade LX200 16" SCT telescope with large 58mm LRGB filter set and all required cables. Kit includes: #17801, #17368, #17360, #17361, #17274, #17367, #17806, #17471, #17672, #17695, #17690.	\$3,137.00 \$3,100.00
TCF-S	TCF-S Temperature Compensating Focuser Kit. Typical TCF-S 2" focuser systems designed for the Meade 10"/12"/14" LX200 SCT telescopes, 12-ft cables, 2" to 1¼" reducing adapter. Kit includes: #17455, #17670, #17662, #17471, #17672, #17695, #17690.	\$1,056.00 \$1,000.00
TCF-Si	TCF-Si Integrated Temperature Compensating Focuser Kit.	\$795.00
TCF-S3	TCF-S 3" Temperature Compensating Focuser Kit. Typical TCF-S 3" focuser system designed for the Meade 16" LX200 mount, 12-ft. cables, 3" to 2" reducing adapter. Kit includes: #17801, #17677, #17804, #17471, #17672, #17695, #17690.	\$2,083.00 \$2,000.00
TCF-S3i	TCFS-3i 3" Integrated Temperature Compensating Focuser Kit.	\$1,795.00
Pyxis	Pyxis 2-inch Camera Field Rotator Kit. Typical Pyxis 2-inch Camera Field Rotator kit includes: #17645, #17646, #17672, #17695, #17690.	\$1,049.00 \$1,000.00
Pyxis 3"	Pyxis 3-inch Camera Field Rotator Kit. Typical Pyxis 3-inch Camera Field Rotator kit includes: #17801, #17745, #17806, #17672, #17695, #17690.	\$2,169.00 \$2,150.00



SINGLE-CHANNEL PHOTOMETERS

17003	Model SSP-3 Solid State Stellar Photometer, Generation 2. Includes: 1¼" telescope coupler, 1 mm diameter photodiode with 1 mm field aperture mounted, 9V rechargeable battery, 12 VDC power supply/charger for 100-240 VAC, serial data/control I/O, and Install CD with SSPDataq for B V photometry. Order 2-position filter slider, filters and serial cable separately. See page 3 for filter selection.	\$1,295.00
17005	Model SSP-3A Automated Solid-State Stellar Photometer, Generation 2. Includes: 1¼" telescope coupler, 1 mm diameter photodiode with 1 mm field aperture mounted, filter slider stepper motor, 12 VDC power supply for 100-240 VAC, serial data/control I/O and Install CD with SSPDataq for B V photometry. Order 6-position filter slider, filters and serial cable separately. See page 3 for filter selection.	\$1,395.00
17006	Model SSP-4 Infrared Stellar Photometer. Includes: 1¼" telescope coupler, 1.0mm infrared InGaAs cooled photodiode detector, 5 VDC power supply (stock #17065) and Install CD with SSP4Dataq. Order 2-position filter slider, J-H filters and serial cable separately. See page 3 for filter selection. This instrument is not available in automatic slider version. Advise Optec of the telescope type to be used with the SSP-4. The focus in the infrared may be different from the visual focus requiring an adjustment of the focusing eyepiece to compensate for this difference. Purchasers of the SSP-4 must indicate the telescope make and type when ordering.	\$2,495.00
17007	Model SSP-5 PMT Stellar Photometer, Generation 2. Includes: 1¼" telescope coupler, 1 mm field aperture, 12 VDC power supply for 100 – 240 VAC and Install CD with SSPDataq for B V photometry. Order PMT, 2-position filter sliders, filters and serial cable separately. See page 3 for filter selection.	\$2,095.00
17009	Model SSP-5A Automated PMT Stellar Photometer, Generation 2. Includes: 1¼" telescope coupler, 1 mm field aperture, filter slider stepper motor, 12 VDC power supply for 100 – 240 VAC and Install CD with SSPDataq for B V photometry. Order PMT, 6-position filter slider, filters and serial cable separately. See page 3 for filter selection.	\$2,495.00
17021	Automated Filter Slider Upgrade, SSP-3 to SSP-3A or SSP-5 to SSP-5A. Includes 6-position filter bar.	\$495.00
17025	Automated Flip-mirror Upgrade, SSP-3A or SSP-5A. Includes: motorized flip mirror controlled through SSPDataq2 software, C-mount relay lens and camera mount. (C-mount camera sold separately.)	\$395.00
17533	Upgrade SSP-3 or 3A instrument to Generation 2.	\$495.00
17535	Upgrade SSP-5 or 5A instrument to Generation 2.	\$595.00

DETECTOR APERTURE OPTIONS

17011	0.5 mm diameter field aperture for SSP-3/3A or SSP-5/5A.	\$65.00
17012	0.75 mm diameter field aperture for SSP-3/3A or SSP-5/5A.	\$65.00
17013	2 mm diameter field aperture for SSP-3/3A (larger detector) or SSP-5/5A.	\$75.00

PHOTOMULTIPLIER TUBE OPTIONS (SSP-5/SSP-5A photometers)

17015	Hamamatsu R6350 Sb-Cs PMT with S-5 response (185 to 650 nm).	\$350.00
17017	Hamamatsu R6358 Multialkali PMT with extended red response (185 to 830 nm).	\$725.00

SOFTWARE

17030	SSPDataq2 photometer control, data acquisition and data reduction package for UBVRTI This software program is an expansion of the freeware SSPDataq available with the SSP photometers or from our software download site. Program supports UBVRTI data acquisition and complete 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.	\$295.00
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FILTER SLIDERS

17050	2-position filter slider for manual photometers.	\$65.00
17052	6-position filter slider for automatic photometers.	\$195.00



BATTERIES AND POWER SUPPLIES

17060	9 volt Nickel Hydride battery replacement.	\$17.00
17064	12 VDC Universal Power Supply, input range 90-264V AC, 12-watt output. For use with most Optec devices including TCF-S, IFW, SSP-3, SSP-5 and PYXIS.	\$29.00
17065	5 VDC Power Supply, input range 100-120V AC input, 15-watt output. Use with SSP-4 only.	\$29.00
17067	6-foot power supply extender cable.	\$17.00

SERIAL CABLES FOR SSP PHOTOMETERS

RS-232 null modem cable for connection between PC DB-9 serial port and DB-9 port on SSP photometers

17154	6-ft. Serial cable for SSP photometers, DB-9 F/F.	\$24.00
17155	10-ft. Serial cable for SSP photometers, DB-9 F/F.	\$30.00
17156	15-ft. Serial cable for SSP photometers, DB-9 F/F.	\$40.00
17157	25-ft. Serial cable for SSP photometers, DB-9 F/F.	\$52.00

CARRYING & STORAGE CASES

17200	SSP-3 or SSP-4 Carrying & Storage Case.	\$145.00
17205	SSP-5 Carrying & Storage Case.	\$145.00
17210	SSP-3A Carrying & Storage Case.	\$145.00
17215	SSP-5A Carrying & Storage Case.	\$145.00

1/2" DIAMETER ROUND FILTERS for SSP Photometers, 7.0±0.2 mm thick.

Designed for mounting in 2 or 6 position filter sliders (stk. #17050, #170523)

17027	Sloan g' filter for SSP-3 or SSP-5 photometer.	\$125.00
17028	Sloan r' filter for SSP-3 or SSP-5 photometer.	\$125.00
17029	Sloan i' filter for SSP-3 or SSP-5 photometer with R6358 PMT.	\$125.00
17031	Johnson U (Ultra-Violet) filter for SSP-3 or SSP-5 with R6358 PMT	\$79.00
17032	Johnson B (Blue) filter for SSP-3 or SSP-5 with R6358 or R6350 PMT	\$79.00
17033	Johnson V (Visual) filter for SSP-3 or SSP-5 with R6358 PMT	\$79.00
17034	Johnson R (Red) filter for SSP-3 or SSP-5 with R6358 PMT.	\$79.00
17035	Johnson I (Infrared) filter for SSP-3	\$79.00
17036	Clear filter window for any SSP Photometer	\$35.00
17137	J-band filter, 1.25 µm CW, .28µm BW for SSP-4 infrared photometer.	\$300.00
17138	H-band filter, 1.65 µm CW, .30µm BW for SSP-4 infrared photometer.	\$300.00
17041	Johnson U (Ultra-violet) filter for SSP-5 with R6350 PMT.	\$79.00
17043	Johnson V (Visual) filter for SSP-5 with R6350 PMT.	\$79.00
17045	Strömrgren u (ultra-violet) filter for SSP-5 with R6358 or R6350 PMT	\$99.00
17046	Strömrgren v (violet) filter for SSP-5 with R6358 or R6350 PMT	\$99.00
17047	Strömrgren b (blue) filter for SSP-5 with R6358 or R6350 PMT	\$99.00
17048	Strömrgren y (yellow) filter for SSP-5 with R6358 or R6350 PMT	\$99.00
17049	Hβ narrow and wide band filter set with R6358 or R6350 PMT	\$179.00

Set of two interference filters used to study the strength of Hβ absorption at 4861Å. The narrow band filter has a halfwidth (FWHM) of 3 nm and the wide band filter has a halfwidth of 15 nm. These two filters must be used together and are often used in conjunction with the Strömrgren four-color filter set.



TELECOMPRESSOR LENS SYSTEMS

17403	<p>NextGEN MAXfield NGM 0.33X Telecompressor Lens</p> <p>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. Now compatible with SBIG'S CFW-8 color wheel. Stk. #17430, violet light rejection filter included. (NOTE: Order NextGEN CCD camera mounting plate separately above.) [2-inch male barrel mount // OPTEC-2100 male dovetail]</p>	\$245.00
17406	<p>NextGEN WideField NGW 0.5X Telecompressor Lens</p> <p>Second generation WideField telecompressor design with 0.5X reduction. Re-design of Optec's WideField reducer provides improved color correction and longer back-focus. Provides unvignetted field approx. 18mm in diameter. Now compatible with SBIG's CFW-8 color wheel. (NOTE: Order NextGEN CCD camera mounting plate separately below.) [2-inch male barrel mount // OPTEC-2100 male dovetail]</p>	\$275.00
17408	<p>NextGEN Agos Adapter f/6.3 Focal Reducer kit</p> <p>Special retrofit kit for the Meade, Celestron, and Antares f/6.3 focal reducer lens sets. Allows f/6.3 telecompressor to be used with the TCF-S or any 2-inch focuser and the Pyxis camera field rotator. Can also be used with a variety of camera, filter wheel and adaptive optics unit (AO) combinations. REQUIRES CUSTOMER'S f/6.3 OPTICS. Installation available upon request or "do-it-yourself" kit will be shipped complete with instructions. [2-inch male barrel mount // OPTEC-2100 male dovetail]</p>	\$99.00
17409	<p>NextGEN Ultra WideField 0.70X Telecompressor Lens</p> <p>New parfocal 0.7X reduction telecompressor specifically designed to work with Apochromat 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] WORKS GREAT WITH NEW MEADE ACF TELESCOPES!</p>	\$275.00
17480	<p>NEW!!! NGC 316 NextGEN 3" Corrector/Reducer 0.75X Lens</p> <p>New 3" diameter telecompressor / corrector specifically designed for large, classical Schmidt-Cassegrain telescopes such as the Meade LX200 16". The NGC 316 corrects edge of field stars to 35mm diagonal while flattening and reducing the focal ratio to f/7.5. Ideal for use with large format CCD cameras. Order camera mounting plate below. Requires a 3" receiver or focuser such as the TCF-S 3" (stk #17677). [3-inch male barrel mount // OPTEC-3100 male dovetail]</p>	\$1,250.00
17370	<p>APUS 0.36X SCT webcam telecompressor for Schmidt-Cassegrains.</p>	\$65.00
17374	<p>APUS 2.5X SCT webcam tele-extender for Schmidt-Cassegrains.</p> <p><i>Price Reduced!! - Available while supplies last.</i></p>	\$65.00

2" RECEIVER FOR NextGEN TELECOMRESSORS

17401	<p>2" SCT Receiver to accept NextGEN Telecompressors.</p> <p>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" eyepiece or push-fit accessory. [2" SCT thread female - 2-inch ID female]</p>	\$60.00
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3" RECEIVER FOR NextGEN f/7.5 CORRECTOR

17481	<p>3" Receiver Tube to accept NGC 318 f/7.5 Reducer / Corrector.</p> <p>Special 3" I.D. receiver tube to accept NGC318 or any 3" diameter push-fit accessory. Designed to attach to Optec-3600 male dovetail mount. Requires 3" telescope mount with Optec-3600 male dovetail (see price list page 6). [OPTEC-3600 female // 3-inch female barrel mount]</p>	\$95.00
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NextGEN CCD CAMERA MOUNTING PLATES

These mounting plates fit onto 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 of each mount is cut to match the proper back-focus for a particular camera/filter wheel combination. For the most current compatibility list, consult our web site under mounting plates for NextGEN telecompressors to see and find stock numbers for all available camera mounts.

17392-X	T-thread mounting plate. 2" NextGEN Telecompressor to T-thread camera mounting plate. Select camera type from table below. [OPTEC-2100 female // T-thread 42x 0.75mm male thread]	\$60.00
17395-X	Pentax thread mounting plate. 2" NextGEN Telecompressor to Pentax-thread camera mounting plate. Select camera type from table below. [OPTEC-2100 female // Pentax 42x 1mm male thread]	\$60.00
17396-X	SCT-thread mounting plate. 2" NextGEN Telecompressor to SCT-thread camera mounting plate. Select camera type from table below. [OPTEC-2100 female // SCT 2-inch 24tpi male thread]	\$60.00
17392-X	C-thread mounting plate. 2" NextGEN Telecompressor to C-thread camera mounting plate. Select camera type from table below. [OPTEC-2100 female // C-thread 1-inch 32tpi male thread]	\$60.00
17398	QSI 500 wsg replacement 4-bolt mount. Special mount to hold proper back focus for main chip in WSG models. Tests indicate difficulty in obtaining a guide star with NGW and NGUW telecompressors due to off-axis distance.	\$60.00

Camera Type	Tube Length	Thread	Stock Number
SBIG ST-6B	1.74	T	17392-1.74
SBIG ST-7/8/9/10/2000 with old 0.20-inch thick front plate on camera and D block with T-thread	1.43	T	17392-1.43
SBIG ST-7/8/9/10/2000 with new 0.25 inch thick front plate on camera and D-block with T-thread	1.38	T	17392-1.38
SBIG ST-7/8/9/10/2000 with CFW-8/8A/9 filter wheel with old 0.20 inch thick front plate and no D-block	0.72	T	17392-0.72
SBIG ST-7/8/9/10/2000 with CFW-8/8A/9 filter wheel with new 0.25 inch thick front plate and no D-block	0.67	T	17392-0.67
SBIG ST-7/8/9/10/2000 with CFW-10 filter wheel mounted directly on camera without face plate and with D-block	0.80	T	17392-0.80
For more information about the backfocus distance for SBIG cameras with or without the CFW-8/8A/9/10 filter wheels, see: www.sbig.com/sbwhtmls/stbackfocus.htm			
SBIG ST-402ME, ST-237, ST-5C & STV	1.71	T	17392-1.71
Meade Pictor 416	1.69	T	17392-1.69
Starlight Xpress MX & HX series	1.67	Pentax	17395-1.67
Starlight Xpress SXV-H9 T-thread camera	1.67	T	17392-1.67
Finger Lakes Instruments MaxCam with SCT-thread	1.30	SCT	17396-1.30
Any C-mount camera with standard lens mount	1.69	C	17399-1.69
Any CS-mount camera with CS lens mount	1.89	C	17399-1.89
Apogee KX1, KX2, KX14, KX260 and KX85	1.70	SCT	17396-1.70
Apogee AP1, AP2, AP260, AP7AB, AP7AP and AP47p	1.23	SCT	17396-1.23
Apogee AP6	0.96	SCT	17396-0.96
Apogee AP8	1.11	SCT	17396-1.11
Apogee AP8B and AP8P	1.17	SCT	17396-1.17
Meade Deep Sky Imager	2.05	T	17392-2.05
Meade Deep Sky Imager Pro with RGB filter bar	1.39	T	17392-1.39
SAC10 from SAC Imaging Systems	1.65	T	17392-1.65
SBIG STL with SBIG 3mm thick filters using the female SCT mount.	0.92	SCT	17396-0.92
SBIG STL without filters using the female SCT mount.	0.88	SCT	17396-0.88
QSI 520 WSCI camera	1.01	T	17392-1.01
QSI 500 WSG camera with off-axis guiding capability.	n/a	QSI	17398



NEXTGEN 3" CCD CAMERA MOUNTING PLATES

These mounting plates fit onto the male Optec-3100 dovetail (3.1" diameter) on the camera side of the NGC 316 NextGEN 3" telecompressor lens system. The tube length of each mount is cut to match the proper back-focus for a particular camera/filter wheel combination. For the most current compatibility list, consult our web site under mounting plates for NextGEN 3" telecompressors to see and find stock numbers for all available camera mounts.

17482-x	T-thread mounting plate. 3" NextGEN Telecompressor to T-thread camera mounting plate. Select camera type from table below. [OPTEC-3100 female // T-thread 42x 0.75mm male thread]	\$95.00
17483-x	STL Camera mounting plate. 3" NextGEN Telecompressor to SBIG STL camera mounting plate. [OPTEC-3100 female // SBIG STL 4-bolt mount]	\$95.00
17484-x	ALTA Camera mounting plate. 3" NextGEN Telecompressor to Apogee ALTA camera mounting plate. [OPTEC-3100 female // Apogee ALTA 8-bolt mount]	\$95.00
17485-x	Pentax thread mounting plate. 3" NextGEN Telecompressor to Pentax-thread camera mounting plate. Select camera type from table below. [OPTEC-3100 female // Pentax 42x 1mm male thread]	\$95.00
17486-x	SCT-thread mounting plate. 3" NextGEN Telecompressor to SCT-thread camera mounting plate. Select camera type from table below. [OPTEC-3100 female // SCT 2-inch 24tpi male thread]	\$95.00
17487-x	Digital SLR Bayonet mounting plate. 3" NextGEN Telecompressor to T-thread camera mounting plate with DSLR bayonet. Select camera type from table below. [OPTEC-3100 female // T-threaded bayonet mount]	\$125.00
17488-x	72x1mm threaded mounting plate. 3" NextGEN Telecompressor to SCT-thread camera mounting plate. Select camera type from table below. [OPTEC-3100 female // 72mm thread mount]	\$95.00
17489-x	72x1mm threaded mounting plate. 3" NextGEN Telecompressor to SCT-thread camera mounting plate. Select camera type from table below. [OPTEC-3100 female // tube]	\$95.00

*Calculation: Tube Length = 3.276" – Optical Back Focus – Mount thickness
(Mount thickness: STL = 0.10"; SCT = 0.15"; T = 0.15"; ALTA = 0.27"; Pentax = 0.15"; 72x1mm = 0.10")*

Camera Type	Tube Length	Mount	Stock Number
Apogee D02 Housing – U9, U10 standard camera.	2.11	SCT	17486-2.11
Apogee D06 Housing – U6, U9, U10, U4000 camera.	2.67	SCT	17486-2.67
Apogee D07 Housing – U16, U16M, U9000 std. camera.	2.00	ALTA	17484-2.00
Apogee D09 Housing – U16, U16M, U9000 high cooling camera.	1.61	ALTA	17484-1.61
Apogee D11 Housing – U16, U16M, U9000 low profile camera.	2.43	ALTA	17484-2.43
Canon 20D DSLR camera - bayonet mount.	0.97	DSLR	17487-0.97
FLI MicroLine Cameras	2.29	Tube	17489-2.29
FLI ProLine Cameras	2.09	Tube	17489-2.09
SBIG STL with internal SBIG 3mm thick filters using the 4-bolt mount.	1.71	STL	17483-1.71
SBIG STL with FW-8 and 3mm thick filters using the 4-bolt mount.	1.36	STL	17483-1.36
SBIG STL without filters using the 4-bolt mount.	1.67	STL	17483-1.67
SBIG ST-4000.	2.21	T	17482-2.21
SBIG ST-10 with CFW10 mounted directly to camera with the D-block.	1.69	T	17482-1.69
SBIG ST-10 with CFW10 and 0.25" front plate and with the D-block.	1.44	T	17482-1.44
QHY-8 camera	2.30	T	17482-2.30
Starlight Xpress MX & HX series	2.41	Pentax	17485-2.41
Starlight Xpress SXV-H9 camera	2.41	T	17482-2.41
Starlight Xpress SXVF-H35 & -H36	2.49	72x1mm	17488-2.49
Camera / filter wheel combination not listed			Call Optec



TELESCOPE ADAPTERS TO OPTEC-2400 MOUNT

These telescope mounts fit various scopes and present the Optec-2400 Dovetail Mount (2.4" diameter) for attaching the original 2-inch IFW Filter Selector or TCF-S Focuser.

17417	PlaneWave CDK 12.5 mount to OPTEC-2400 dovetail adapter.	\$95.00
17418	PlaneWave CDK 17/20 mount to OPTEC-2400 dovetail adapter.	\$95.00
17451	Takahashi 2.5" (63mm) male threaded mount to OPTEC-2400 dovetail adapter. This mount fits the Takahashi Sky 90 telescope drawtube with TKP35001 coupling removed.	\$84.00
17651	Takahashi 2.8" (72mm) male mount, fits the Takahashi Mewlon 210 and 250, to OPTEC-2400.	\$84.00
17652	TeleVue 3" male threaded mount for NP101 to OPTEC-2400 dovetail adapter.	\$69.00
17453	Takahashi 2.8" (72mm) female threaded mount to OPTEC-2400 dovetail adapter.	\$84.00
17454	Meade/Celestron Mount for 2" Rear Cell Thread, Meade/Celestron 8", Celestron 9.25" telescopes	\$63.00
17455	Meade Telescope Mount for 3" Rear Cell Thread, Meade 10", 12" and 14" telescopes.	\$63.00
17456	Meade Telescope Mount for 4" Rear Cell Thread, Meade 16" telescopes.	\$95.00
17457	Celestron Telescope Mount for 3" Rear Cell Thread, Celestron C-11/C-14 telescopes.	\$63.00
17458	AstroPhysics 2.7" male threaded mount to OPTEC-2400 dovetail.	\$84.00
17459	2" Barrel Mount (male) to OPTEC-2400 dovetail.	\$63.00
17653	1/2" Extender for OPTEC-2400 dovetail mounts, female to male.	\$59.00
17655	1" Extender for OPTEC-2400 dovetail mounts, female to male.	\$59.00
17656	Takahashi FS-78 mount, fits the 2.2-inch thread directly to OPTEC-2400 dovetail adapter.	\$63.00
17962	OPTEC-2400 dovetail to Apogee 2.5" X 20tpi threaded mount. This special adapter can be used to adapt the Apogee DO7 body with a male OPTEC-2400 dovetail enabling the IFW to be used with the camera in a reverse direction. This orientation provides an very close fit for the IFW and is usually ordered with the #17760 IFW mounting ring with 3" dovetail mount for the NGC316 3-inch telecompressor.	\$75.00

OPTEC-2400 DOVETAIL RECEIVER ADAPTERS

These female adapters receive the OPTEC-2400 male dovetail mounts for special situations and conversions.

17658	AstroPhysics 2.7" female threaded mount to OPTEC-2400 dovetail.	\$75.00
17659	Standard mountable receiver, OPTEC-2400 female receiver.	\$75.00

TELESCOPE ADAPTER TO OPTEC-3600 MOUNT

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)

17800	Standard mount blank, OPTEC-3600 male dovetail. Plate can be drilled and machined.	\$95.00
17801	Meade 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) female mount to OPTEC-3600 dovetail adapter. Mounts to FS-102/128/152 with TKP27113 89mm adapter ring, TOA-130/150 with TKP31003 coupling(W) and Mewlon 300.	\$95.00
17810	AstroPhysics 4.87-inch thread mount to OPTEC-3600 dovetail adapter.	\$95.00
17812	Starlight 3.5 inch focuser model 3545 mount to OPTEC-3600 dovetail adapter.	\$95.00
17814	TMB 4.3-inch thread mount to OPTEC-3600 dovetail adapter.	\$95.00
17815	AstroPhysics 4.3-inch I.D. mount to OPTEC-3600. IMPROVED! Now only uses 1/10" back focus.	\$95.00
17817	PlaneWave CDK 12.5 mount to OPTEC-3600 dovetail adapter.	\$95.00
17818	PlaneWave CDK 17/20 mount to OPTEC-3600 dovetail adapter.	\$95.00
17819	Vixen VMC260 telescope mount to OPTEC-3600 dovetail adapter.	\$95.00
17820	FLI PDF 4-inch V-groove to OPTEC-3600 dovetail adapter.	\$95.00
17821	VSI SideWinder 2.9-inch dovetail mount to OPTEC-3600 dovetail adapter.	\$95.00
17822	Ceravolo CDK 5-inch mount to OPTEC-3600 dovetail adapter.	\$95.00



17823	RC Optical 4.75" x 24tpi threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
17824	Meade RCX 3-inch threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
17825	Takahashi 89mm threaded mount to OPTEC-3600 dovetail adapter.	\$95.00
17826	PlaneWave 12.5" SecureFit to OPTEC-3600 dovetail adapter. Designed for use with #17835 3-inch to PlaneWave 12.5" SecureFit adapter and Pyxis 3-inch.	\$95.00
17827	PlaneWave 12.5" Low Profile to OPTEC-3600 dovetail adapter. Special low profile adapter bolts directly to Hedrick focuser and consumes zero back-focus.	\$65.00
17828	PlaneWave 17/20" Low Profile to OPTEC-3600 dovetail adapter. Special low profile adapter bolts directly to Hedrick focuser and consumes 0.235" of back-focus.	\$95.00
17829	Meade / Celestron 2" 24tpi thread (SCT thread) to OPTEC-3600 dovetail adapter.	\$95.00

OPTEC-3600 DOVETAIL RECEIVER ADAPTERS

These female adapters receive the OPTEC-3600 male dovetail mounts for special situations and conversions.

17858	AstroPhysics 2.7" female threaded mount to OPTEC-3600 dovetail adapter. Adapts any OPTEC-3600 male dovetail mount to the AstroPhysics 2.7" female thread.	\$95.00
17879	Standard mountable receiver, OPTEC-3600 female receiver. Includes 4 bolt pattern or can be drilled as necessary to adapter many devices to OPTEC-3600 dovetail.	\$75.00

TEMPERATURE COMPENSATING FOCUSER SYSTEMS

17668	Model TCF-Si, Integrated Temperature Compensating Focuser. Complete 2" TCF-Si focuser with integrated control circuit. Includes TCF-Si focuser, temperature sensor probe with 20" cable, and power supply. Order telescope mount, 9-pin serial port converter (stock #17695) and RJ-12 reverse cable separately. [OPTEC-2400 female dovetail // 2-Inch I.D. female receiver]	\$695.00
17670	Model TCF-S, 2" Temperature Compensating Focuser. Includes 2" TCF-S focuser, temperature sensor probe with 20" cable, control box with precision digital display (DRO) and IN/OUT manual focus push buttons and power supply. Order telescope mount, control cable and optional adapters separately. For PC computer operation, order 9-pin serial port converter (stock number 17695) and RJ-12 reverse cable separately. [OPTEC-2400 female dovetail // 2-Inch I.D. female receiver]	\$829.00
17676	Model TCF-S3i, 3" Integrated Temperature Compensating Focuser. Complete 3-inch TCF-S3i focuser with integrated control circuit. Includes TCF-S3i focuser, temperature sensor probe with 20" cable, and power supply. Order telescope mount, 9-pin serial port converter (#17695) and RJ-12 reverse cable separately.	\$1,595.00
17677	Model TCF-S3, 3" Temperature Compensating Focuser. Same as 17670 except the focuser is much more massive and capable of handling instrument loads up to 25 pounds. Recommended for observatory class telescopes with large field diameters. Includes: temperature sensor probe with 20" cable, control box and power supply. Uses same accessories as 17670. Selection of telescope mounts is limited to large sizes only. [OPTEC-3600 female dovetail // 3-Inch I.D. female receiver]	\$1,799.00
17528	Conversion TCF-S to TCF-Si	\$195.00
17529	Conversion TCF-S3 to TCF-S3i	\$225.00
17661	Custom temperature sensor probe option If the default cable length (20 inches) for the temperature probe is not acceptable, this option allow and length up to 6 feet to be specified.	\$15.00

REMOTE KEYPAD FOR TCF-S and TCF-S3

17680	Remote IN/OUT Keypad Aluminum hand paddle with IN and OUT pushbuttons works well with TCF-S / TCF-S3 or integrated TCF-Si / TCF-S3i focusers. Plugs into temperature probe connector on the motor housing and allows for manual focusing. Connection is hot swappable. Default cable length is 3 feet.	\$139.00
17681	Custom remote cable length option If the default cable length of 3 feet is not acceptable, this option allows any length up to 6 feet to be specified.	\$15.00
17682	Remote IN/OUT Keypad and Temperature Probe Extension Cable. 6-ft. (2m) extension cable with 6-pin DIN male to female connections.	\$20.00



2-inch DRAWTUBE ADAPTERS FOR TCF-S

17662	2-inch to 1¼" adapter fits directly into the 2" TCF focuser.	\$59.00
17663	2-inch to 1¼" compression adapter fits directly into the 2" TCF focuser. Includes quick-release locking ring and brass compression ring for 1¼" eyepieces.	\$65.00
17664	2-inch to T-thread adapter fits directly into the 2" TCF focuser. [2-inch male barrel mount // T-thread 42x0.75mm male thread]	\$59.00
17665	2-inch to SCT thread (2" diameter) adapter, fits directly into the 2" TCF focuser. [2-inch male barrel mount // Pentax M42x1mm male thread]	\$59.00
17666	2-inch to 3"x 24 tpi male threaded mount. Fits Apogee, SBIG and some FLI 3" x 24tpi camera face threads.	\$95.00

3-inch DRAWTUBE ADAPTERS FOR TCF-S3 AND PYXIS 3-INCH

17804	3-inch to 2" reducer bushing – now with removable compression ring. Adapter with three setscrews and brass compression ring allows any 2-inch drawtube adapter to fit the TCF-S3 and Pyxis 3-inch.	\$85.00
17805	3-inch to OPTEC-2400 male dovetail.	\$85.00
17806	3-inch to STL camera mount. This adapter attaches to the 4-bolt pattern on the STL and fits into the TCF-S3 and Pyxis 3-inch.	\$85.00
17807	3-inch to AstroPhysics 2.7" mount for TCF-S3 and Pyxis 3-inch	\$85.00
17811	3-inch to OPTEC-3600 mount for attaching the TCF-S3 to the Pyxis 3-inch.	\$85.00
17813	3-inch to Starlight 3.5-inch focuser model 3545 adapter mount.	\$85.00
17816	3-inch to 3-inch Extender tube. Extends focus range from 1.0 to 3.1 inches – can be cut to size.	\$85.00
17830	3-inch to Apogee camera face mount, 8-bolt hole pattern.	\$125.00
17831	3-inch to FLI PDF 3-3/4" thread mount.	\$95.00
17832	3-inch to FLI CFW 3.005" 24tpi threaded mount. Fits securely into the standard 3" x 24tpi camera thread as specified by SBIG (STX model), Apogee and other camera manufacturers with a 3"x24tpi thread spec.	\$95.00
17833	3-inch to 3.000" 24tpi threaded mount. Similar to #17832 above with the non-standard 3.005" x 24tpi thread spec for the FLI CFW.	\$95.00
17834	3-inch to Takahashi 72mm female thread	\$95.00
17835	3-inch to PlaneWave SecureFit CCD Spacer. This adapter can be used with #17826 PlaneWave SecureFit to OPTEC-3600 adapter and the Pyxis 3" rotator to directly substitute the PlaneWave 4.8" SecureFit spacer.	\$95.00
17836	3-inch to Meade 3" SCT thread. Fits the TCF-S3 or Pyxis 3" and presents the standard Meade 3" rear cell thread for other accessories.	\$95.00
17837	3-inch to Celestron 3" SCT thread. Fits the TCF-S3 or Pyxis 3" and presents the standard Celestron 3" rear cell thread for additional accessories	\$95.00



IFW AUTOMATED FILTER SELECTOR SYSTEMS

17350	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. A 12 VDC power supply included. Order telescope mount, mounting ring, control cable, PC control cable, filter wheels and filters separately. [OPTEC-2400 female dovetail // OPTEC-2380 female thread]	\$829.00
17360	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. A 12 VDC power supply included. Order 3" telescope mount, rear camera side adapters, control cable, PC control cable, filter wheels and filters separately. [OPTEC-3600 female dovetail (w/ #17368) // OPTEC-3000 receiver (w/ #17367)]	\$1,295.00

IFW FILTER WHEELS for 2" IFW

17353	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
17356	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
17357	8-position Filter Wheel, for 25.4mm 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 #17580 is included.	\$245.00

IFW 3" FILTER WHEELS for 3" IFW

17361	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
17362	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
17363	9-position Filter Wheel for 50mm Round Filters with mounting tabs 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. This configuration requires the Rear 2" Cover plate #17366 and the Telescope Adapter for 2" #17369.	\$345.00

MAXfilter 2" 3-Position Filter Slider

17452	3-position filter slider for 50mm filters. Back by popular demand – compatible with the original 3-position MAXfilter system. Tab option not available.	\$95.00
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Optical Bench 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



TAB & SPACER KITS FOR NEW IFW FILTER WHEELS WITH TAB MOUNTING

17580	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
17581	Tab and Spacer Kit for Five 50mm round filters Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
17584	Tab and Spacer Kit for Five 2-inch round filters Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
17585	Tab and Spacer Kit for Six 50mm square filters Includes: 24 tabs, 6 spacers 0.75mm thk., 6 spacers 1.5mm thk. and 24 stainless 4-40 pan head screws.	\$20.00
17586	Tab and Spacer Kit for Five 58mm square filters Includes: 15 tabs, 5 spacers 0.75mm thk., 5 spacers 1.5mm thk. and 15 stainless 4-40 pan head screws.	\$20.00
17587	Tab and Spacer Kit for Nine 50mm round filters Includes: 27 tabs, 9 spacers 0.75mm thk., 9 spacers 1.5mm thk. and 27 stainless 4-40 pan head screws.	\$35.00

CAMERA SIDE MOUNTING RINGS FOR IFW & MAXFILTER (2-inch model)

17460	Universal Mounting Ring for MAXfield/WideField or any 2" barrel accessory. [OPTEC-2380 male thread // 2-inch female barrel mount]	\$59.00
17461	TCF Mounting Ring for TCF-S focuser or any OPTEC-2400 receiver. [OPTEC-2380 male thread // OPTEC-2400 male dovetail]	\$59.00
17462	JMI MotoFocus Mounting Ring for JMI NGF-S motorized focuser.	\$59.00
17463	ST-1001E Mounting Ring for SBIG ST-1001E CCD camera. (OBSOLETE only a few units left)	\$105.00
17464	SCT Threaded Mounting Ring with male 2" short thread. Intended for some Apogee cameras	\$59.00
17465	T-Thread Mounting Ring with 42mm T-thread for direct camera coupling.	\$59.00
17466	C-mount Mounting Ring for C-mount cameras.	\$59.00
17467	SCT Threaded Mounting Ring with male 2" long thread. Intended to fit Visual Back accessories	\$59.00
17468	Pentax Threaded Mounting Ring for IFW.	\$59.00
17469	Blank OPTEC-2300 receiver Mounting Ring for IFW.	\$45.00
17760	Reverse mounting ring to OPTEC-3000 dovetail mount	\$59.00

IFW 3" TELESCOPE SIDE FRONT COVER PLATES

17368	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]	\$59.00
17369	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]	\$59.00

IFW 3" CAMERA SIDE REAR COVER PLATES

17366	IFW-3" Rear Cover Plate for 2" Accessories – 2-inch clear aperture. 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]	\$59.00
17367	IFW-3" Rear Cover Plate for 3" Accessories – 3-inch clear aperture. 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 3-inch drawtube adapters listed on page 10. [special 4-hole mount for IFW 3-inch // OPTEC-3000 female dovetail]	\$59.00



PYXIS CAMERA FIELD ROTATOR

17645	Pyxis 2-inch I.D. Camera Field Rotator. Pyxis 2-inch camera rotator attaches directly to most CCD camera using one of the mounts listed 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 includes a built-in serial port for remote operations – no external hand control is required. A 12VDC power supply is included. Standard 2-inch nosepiece (stock number 17642) is included but the camera mount must be ordered separately. Order serial port converter (stock number 17695) and reverse cable (stock numbers 17671 to 17675) separately. A PC connection is required for operation. [2-inch male barrel mount // OPTEC-2300 female dovetail]	\$925.00
17745	Pyxis 3-inch I.D. Camera Field Rotator. Pyxis 3-inch camera rotator is a massive unit for large telescopes and heavy instrument packages. Select appropriate telescope mount from the TELESCOPE MOUNTS FOR TCF-S3 AND PYXIS 3-INCH listing on page 4. For telescopes not listed, contact Optec for custom mounts. The camera side is a standard 3-inch I.D. tube and will accommodate the ADAPTERS FOR TCF-S3 AND PYXIS 3-INCH listed on pages 5 and 6. The Pyxis-3inch includes a built-in serial port for remote operations – no external hand control is required. A 12VDC power supply is included. Order serial port converter (stock number 17695) and reverse cable (stock numbers 17671 to 17675) separately. A PC connection is required for operation. [OPTEC-3600 female dovetail // OPTEC-3000 3-inch female dovetail]	\$1,925.00

PYXIS Accessories

17640	L Mounting Bracket with ½ - 20 thread. The L bracket allows the Pyxis to be mounted on a side support or optical bench.	\$25.00
17642	Pyxis 2-inch nosepiece replacement. The Pyxis is shipped with this adapter to fit any 2-inch ID focusing mount. [2-inch barrel mount // OPTEC-2100 male dovetail]	\$59.00

PYXIS 2-inch CAMERA SIDE ADAPTERS (OPTEC-2300 male 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.		
17644	Pyxis STL camera mount with OPTEC-2300 male dovetail. [OPTEC-2300 male dovetail // SBIG STL 4-bolt hole mount]	\$59.00
17646	Pyxis T-thread camera mount. 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]	\$59.00
17647	Pyxis Pentax camera mount. [OPTEC-2300 male dovetail // Pentax M42x1 mm male thread]	\$59.00
17648	Pyxis SCT short threaded camera mount. 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]	\$59.00
17657	Pyxis SCT long threaded mount 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]	\$59.00
17649	Pyxis C-thread camera mount. [OPTEC-2300 male dovetail // C-mount 1-inch male thread]	\$59.00
17650	T-thread to Nikon adapter	\$25.00
17643	Pyxis QSI camera mount.	\$59.00
17654	Extender tube, 16mm length (OPTEC-2300 male dovetail to OPTEC-2300 female receiver). 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-8/10 filter wheel from SBIG to be used, this adapter must be added to the T-thread camera mount stock number 17646.	\$45.00



USB to SERIAL CONVERTERS

17690	USB to Serial Converter 1-Port.	\$30.00
17691	USB to Serial Converter 4-Port. Provides 4 serial ports from one USB connection.	\$175.00

PC SERIAL PORT CONVERTER

17695	PC Serial Port Converter, DB-9 to RJ-12, for TCF-S Focuser. 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 17675 below.	\$15.00
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PC SERIAL CABLES FOR TCF-S, TCF-S3, IFW and PYXIS

17671	6-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$17.00
17672	12-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$20.00
17673	25-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$30.00
17674	50-foot RJ-12 Reverse Cable for use with #17695 converter above.	\$40.00
17675	Custom length RJ-12 Reverse Cable for use with #17695 converter above, per foot.	\$5 plus \$0.85/ft.

CONTROL CABLES FOR IFW, IFW 3", TCF-S and TCF-S3

17470	6-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$30.00
17471	12-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$40.00
17472	25-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$50.00
17473	50-foot Control Cable, Hand Controller to TCF-S/IFW, RJ-45 to DB-9.	\$60.00
17474	Custom length Control Cable, Hand Controller to TCF-S/IFW, priced per foot.	\$20 plus \$1.95/ft.

PARAMOUNT WIRING AND MOUNTING KITS

Other combinations are possible. Contact Optec with your requirements. When ordering, please specify the distance from the Paramount to the computer so that the proper lengths of cables (S1 cable as defined in the manual) can be made. Distances up to 50 feet are available at the prices shown.

17496	Paramount ME Mounting & Wiring kit for IFW OR TCF-S AND PYXIS Specially designed platform and hardware kit for mounting the IFW OR TCF-S control box to the telescope plate of the Software Bisque's Paramount ME. In addition, wiring is provided to connect the PYXIS through the mount. Includes all tools, hardware and wires needed to take advantage of the internal auxiliary ports of the mount. The IFW or TCF-S control box is placed at the telescope with minimal wiring clutter.	\$200.00
17497	Paramount ME Mounting & Wiring kit for IFW OR TCF-S. Specially designed platform and hardware kit for mounting the IFW OR TCF-S control box to the telescope plate of Software Bisque's Paramount ME. Includes all tools, hardware and wires needed to take advantage of the internal auxiliary ports of the mount. The IFW or the TCF-S control box is placed at the telescope with minimal wiring clutter.	\$179.00
17498	Paramount ME Mounting & Wiring kit for PYXIS only. Specially designed wiring kit for connecting the PYXIS through the auxiliary port of the Software Bisque's Paramount ME.	\$99.00
17499	Paramount ME Mounting & Wiring kit for IFW & TCF-S. Specially designed platform and hardware kit for mounting the IFW AND TCF-S control boxes to the telescope plate of Software Bisque's Paramount ME. Includes all tools, hardware and wires needed to take advantage of the internal auxiliary ports of the mount. The IFW and the TCF-S control boxes are placed at the telescope with minimal wiring clutter.	\$225.00
17500	Paramount ME Mounting & Wiring kit for IFW, TCF-S AND Pyxis Specially designed platform and hardware kit for mounting the IFW AND TCF-S control boxes to the telescope plate of Software Bisque's Paramount ME. Includes all tools, hardware and wires needed to take advantage of the internal auxiliary ports of the mount. The IFW and the TCF-S control boxes are placed at the telescope with minimal wiring clutter. In addition, power and serial communication cables are provide to connect the Pyxis field rotator.	\$250.00



CUSTOM EQUATORIAL WEDGE

17995	Ultra-Wedge for the Meade 16" LX-200	\$3,700.00
	Optec designed equatorial wedge using 5/8" aluminum plate. Ultra-Wedge for Meade 16" LX200/R/RCX400 telescopes, target latitude specified by customer. Ultra-Wedge includes custom base plate fabricated to match customer supplied hole pattern. Installation kit includes all necessary hardware including leveling washers, all stainless fasteners, and required tools. Weighs approximately 110 pounds. Customer to assume responsibility for final installation.	

LIBRA DOVETAIL MOUNTING SYSTEM

19008	C-8 Dovetail mounting kit. (DC8)	\$90.00
19009	C-9.25 Dovetail mounting kit. (DC9.25)	\$135.00
19011	C-11 Dovetail mounting kit. (DC11)	\$90.00
19014	C-14 Dovetail mounting kit. (DC14)	\$135.00
19018	Meade 8" Dovetail mounting kit. (DM8)	\$90.00
19020	Meade 10" Dovetail mounting kit. (DM10)	\$90.00
19022	Meade 12" Dovetail mounting kit. (DM12)	\$150.00
19024	Meade 14" Dovetail mounting kit. (DM14)	\$150.00
19026	Meade 16" Dovetail mounting kit. (DM16)	\$300.00
19100	90mm Dovetail Ring with carriage, set of 2. (DR90)	\$127.50
19101	108mm Dovetail Ring with carriage, set of 2. (DR108)	\$150.00
19102	125mm Dovetail Ring with carriage, set of 2. (DR125)	\$150.00
19103	160mm Dovetail Ring with carriage, set of 2. (DR160)	\$200.00
19210	Dovetail Plate Adapter. (DA)	\$40.00
19230	Libra Alt-Azimuth Adjusting Base.	\$495.00

PERSEUS INSTRUMENT SELECTOR

19600	4-Port Instrument Selector with three 2" ports and one 3" port.	\$2,975.00
19610	3-inch Saddle with OPTEC-3600 male dovetail mount.	\$125.00
19611	2-inch Saddle with Blank Cover Plate.	\$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.	\$45.00
19620	Parfocal mount with integral OPTEC-2300 dovetail receiver and locking silver tipped setscrews.	\$75.00



All Optec filters are shipped with a custom transmission curve. Wide band filters are measured for transmission in the range of 400 to 1000 nm. The Bessell and Johnson U filters are measured in the range of 350 to 500 nm. Narrow band filters are measured at higher resolution at +/- 50nm from the center wavelength. Data is presented in graphical format.

MOUNTED 2" DIAMETER ROUND FILTERS

Glass filters mounted in 48mm metal threaded cell for insertion into 2" eyepiece or NextGEN telecompressors

17430	Violet light rejection filter, mounted in 48mm threaded cell.	\$30.00
17431	#8 Pale Yellow, mounted in 48mm threaded cell.	\$30.00
17432	Premium UV blocking filter with 435nm cutoff, mounted in 48mm threaded cell.	\$35.00
17433	#21 Orange, mounted in 48mm threaded cell.	\$30.00
17435	#23A Light Red, mounted in 48mm threaded cell.	\$30.00
17436	#47B Blue, mounted in 48mm threaded cell.	\$30.00
17437	#29 Deep Red, mounted in 48mm threaded cell.	\$30.00
17438	#58 Light Green, mounted in 48mm threaded cell.	\$30.00
17439	#80A Medium Blue, mounted in 48mm threaded cell.	\$30.00
17440	IR Blocking Filter, mounted in 48mm threaded cell.	\$95.00
17266	Optec Deep Sky Filter, mounted in 48mm threaded cell.	\$75.00

50 mm DIAMETER ROUND FILTERS for IFW Filter Wheels - unmounted

17229	Violet rejection filter, 2.0±0.4mm thick.	\$30.00
17230	Clear window, 2.0±0.4mm thick.	\$30.00
17231	#8 Pale Yellow, 2.0±0.4mm thick.	\$30.00
17232	#12 Yellow, 2.0±0.4mm thick.	\$30.00
17233	#21 Orange, 2.0±0.4mm thick.	\$30.00
17235	#23A Light Red, 2.0±0.4mm thick.	\$30.00
17236	#47B Blue, 2.0±0.4mm thick.	\$30.00
17237	#29 Deep Red, 2.0±0.4mm thick.	\$30.00
17238	#58 Light Green, 2.0±0.4mm thick.	\$30.00
17239	#80A Medium Blue, 2.0±0.4mm thick.	\$30.00
17240	ND 0.6 (25% T), Neutral Density 25% transmission, 2.0±0.4mm thick.	\$30.00
17246	Dichroic RED-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$135.00
17247	Dichroic GREEN-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$135.00
17248	Dichroic BLUE-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$135.00
17241	Dichroic Luminance filter w/IR-Blocking for LRGB Imaging, Multilayer AR, 2.0±0.1mm thick	\$135.00
17445	Optec LRGB-IR Imaging Filter Set, includes 17246, 17247, 17248 & 17241.	\$455.00
17260	H-Alpha filter, 656.3 nm CW, 8±1.5 nm BW, Transmission > 85%, 2.0±0.1 mm thick.	\$295.00
17261	OIII filter, 500.7 nm CW, 8±1.5 nm BW, Transmission > 85%, 2.0±0.1 mm thick.	\$295.00
17251	Precision Clear filter for use with Bessell set, Multilayer A/R coated, 5.0±0.1mm thick.	\$95.00
17250	Bessell specification U filter for photometry, Multilayer A/R coated, 5.0±0.2mm thick.	\$315.00
17446	Bessell specification B filter for photometry, Multilayer A/R coated, 5.0±0.2mm thick.	\$315.00
17447	Bessell specification V filter for photometry, Multilayer A/R coated, 5.0mm ±0.2thick.	\$315.00
17448	Bessell specification R filter for photometry, Multilayer A/R coated, 5.0±0.2mm thick.	\$315.00
17449	Bessell specification I filter for photometry, Multilayer A/R coated, 5.0±0.2mm thick.	\$315.00
17450	Bessell UBVRI filter set, composed of 17250, 17446, 17447, 17448 and 17449	\$1,400.00
17267	Optec Deep Sky filter, mounted in 50mm bushing (46mm clear aperture), 4.0±0.1mm thick.	\$85.00



50 x 50mm SQUARE FILTERS – by AstroDon Photometrics

19440	AstroDon TruBalance LRGB filter set, 50mm x 50mm, 3mm thick.	\$1200.00
19445	Johnson/Cousins Photometric U filter, 50mm x 50mm, 3mm thick.	\$360.00
19446	Johnson/Cousins Photometric B filter, 50mm x 50mm, 3mm thick.	\$360.00
19447	Johnson/Cousins Photometric V filter, 50mm x 50mm, 3mm thick.	\$360.00
19448	Johnson/Cousins Photometric Rc filter, 50mm x 50mm, 3mm thick.	\$360.00
19449	Johnson/Cousins Photometric Ic filter, 50mm x 50mm, 3mm thick.	\$360.00
19450	Clear filter with UV block, 50mm x 50mm, 3mm thick.	\$250.00
19452	H-alpha 3nm filter, 50mm x 50mm, 3mm thick.	\$1055.00
19453	H-alpha 5nm filter, 50mm x 50mm, 3mm thick.	\$695.00
19454	OIII 3nm filter, 50mm x 50mm, 3mm thick.	\$1055.00
19455	OIII 5nm filter, 50mm x 50mm, 3mm thick.	\$695.00
19456	SII 3nm filter, 50mm x 50mm, 3mm thick.	\$1055.00
19457	SII 5nm filter, 50mm x 50mm, 3mm thick.	\$695.00

58 x 58mm SQUARE FILTERS FOR THE IFW 3”

17270	Dichroic RED-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$295.00
17271	Dichroic GREEN-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$295.00
17272	Dichroic BLUE-IR filter for RGB Imaging, Multilayer AR coating, 2.0±0.1mm thick.	\$295.00
17273	Dichroic Luminance filter w/IR-Blocking for LRGB Imaging, Multilayer AR, 2.0±0.1mm thick	\$295.00
17274	Optec LRGB-IR Imaging Filter Set, includes #17270, 17271, 17272, 17273.	\$1095.00
17275	H-Alpha filter, 656.3 nm CW, 8±1.5 nm BW, Transmission > 85%, 2.0±0.1 mm thick.	\$595.00
17276	O-III filter, 500.7 nm CW, 8±1.5 nm BW, Transmission > 85%, 2.0±0.1 mm thick.	\$595.00
17277	SII filter, 672.4 nm CW, 8±1.5 nm BW, Transmission > 85%, 2.0±0.1 mm thick.	\$595.00

72mm ROUND FILTERS FOR THE NEXTGEN 3”

19471	IDAS LPS filter in 72mm threaded cell.	\$309.00
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CUSTOM OPTICAL SERVICES

17998	Mount customer supplied filter into any wheel or threaded cell.	\$10.00
17999	Custom transmission curve for customer supplied, 350nm to 1000nm.	\$45.00



REPAIR SERVICES AND REPLACEMENT PARTS

17295	Silica gel desiccator 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
17533	Upgrade SSP-3/3A to Generation 2.		\$495.00
17535	Upgrade SSP-5/5A to Generation 2.		\$595.00
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 endcap.		\$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.		\$33.00
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/TCF-S focuser. (\$40.00 credit for return of old)		\$105.00
17563	IFW controller board replacement.		\$195.00
17564	IFW hand control box, complete.		\$245.00
17565	TCF-S/TCF-S3 firmware upgrade PIC chip.	<i>Current version for TCF-S/TCF-S3 = V2.40</i> <i>Current version for TCF-Si/TCF-S3i = V3.00</i>	\$25.00
17566	Stepper driver PIC chip for TCF-S, IFW, or Pyxis.		\$25.00
17567	IFW firmware upgrade PIC chip.	<i>Current version for IFW = V1.11</i> <i>Current version for 8-position IFW = V2.02</i> <i>Current version for IFW 3" = V3.00</i>	\$25.00
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.		\$95.00
17572	PYXIS firmware upgrade PIC chip.	<i>Current version for Pyxis = V1.41</i> <i>Current version for Pyxis 3" = V3.20</i>	\$25.00
17573	PYXIS 3-inch controller board replacement.		\$135.00
17575	IFW filter wheel replacement O-ring, 3-pack.		\$15.00
17576	15 VDC, 18W power supply with right angle plug for Pyxis rotators.		\$34.00
17577	12 VDC power supply for SSP-3/SSP-5/TCF-S/IFW/Pyxis		\$34.00
17578	5 VDC power supply for SSP-4		\$34.00
17579	Replacement circuit board for the Pyxis 2-inch		\$100.00
17593	Pyxis 2" modification to include nylon tip setscrews.		\$25.00
17594	Pyxis 2" or Pyxis 3" upgrade to current standards, flat rate.		\$125.00



BOOKS, MANUALS, AND PUBLICATIONS

All Optec product technical manuals are available for download in pdf format from our website at no charge. Visit www.optecinc.com.

17325	<i>Photoelectric Photometry of Variable Stars</i> , 2 nd Ed. by D.S. Hall and R.M. Genet. Topics include: Automatic Photoelectric Telescopes, Photoelectric Observatories, Data Reduction, Achieving Maximum Accuracy, Observing Program Selection, and much more.	\$28.95
17330	<i>Astronomical Photometry</i> , 2 nd edition. by A. Henden and R. Kaitchuck. The classic text and handbook written for advanced amateurs and professionals. Covers equipment, photometric systems, statistics, observational techniques, data reduction and much more. Hardbound.	\$31.95
17335	<i>CCD Astronomy</i> . by Cristian Buil. Extremely thorough discussion of astronomical CCD cameras including tips and techniques for both constructing and using CCD cameras. Topics include operating CCD and image processing algorithms.	\$27.95
17339	<i>TCF-S Technical Manual, printed and bound</i> Complete description of the TCF-S temperature compensating focuser with serial interface protocol, circuit diagrams, and theory of operation.	\$10.00
17340	<i>SSP-3 Generation 2 Technical Manual, printed and bound</i> Contains complete description of the SSP-3 photometer, Johnson and Wing filters, SSP-3A option, and accessories. Many diagrams and tables.	\$10.00
17344	<i>SSP-4 Technical Manual, printed and bound</i> Contains complete description of the theory and operation of the SSP-4 infrared photometer including circuit diagrams and detector details.	\$10.00
17345	<i>SSP-5 Generation 2 Technical Manual, printed and bound</i> Contains complete description of the SSP-5 photometer, Johnson and Strömngren filters, SSP-5A option, and accessories. Many diagrams and tables.	\$10.00
17347	<i>Pyxis Camera Field Rotator Technical Manual, printed and bound</i> Contains complete description of the Pyxis camera field rotator.	\$10.00
17349	<i>IFW Intelligent Filter Wheel Technical Manual, printed and bound</i> Complete description of the IFW automatic filter selector system including serial interface and circuit diagrams.	\$10.00

WARRANTY AND RETURN POLICY

We warranty all Optec products to be free from defects in workmanship and material for one year from date of delivery. We will replace or repair at our option any item, should it be defective during this period, providing there is no evidence of misuse. Warranty items must be returned to us freight prepaid. Repaired items will be returned via UPS ground within the continental USA at our expense. Overnight shipping services may be arranged in advance at the customer's expense. Contact Optec before returning any instruments for repair and to arrange for return shipping.

If not completely satisfied, return the merchandise with freight prepaid within 30 days from date of invoice and the full purchase price will be refunded. Shipping charges will not be refunded. Any damage to the product will be charged against the refund amount.

