

It is important that the overall back-focus distance be set as closely as possible to the design distance of 100mm on-axis. Measured from the flange at the bottom of the OPTEC-2100 dovetail, the distance works out to 105mm as shown in the PDF in the resources section.

Most of the mechanical camera interfaces require an additional 1/10th inch or 2.5mm of back-focus. The camera backfocus distance, BF, should be known to within about 1mm for best performance and should include the thickness of any filter wheel, off-axis guider or other adapter between the Lepus and camera sensor. Use the table below to find the appropriate mounting plate for many commercially available cameras and configurations. If your camera is not listed below and you know the optical back-focus, BF, and mechanical interface (i.e. T-thread) you can determine the stock number as with the following calculation:

TUBE LENGTH = 105mm - FLANGE THICKNESS - CAMERA BACK-FOCUS

Mechanical Interface	Flange Thickness	Stock No. Prefix
T-thread (M42x0.75mm)	2.5mm	#19392
M48x0.75mm thread	2.5mm	#19394
SCT thread (2" x 24tpi)	2.5mm	#19396
M54x0.75mm thread	2.5mm	#19397
STL 2.156" thread	2.5mm	#19398
C-mount	2.5mm	#19399
Canon and Nikon DSLR requires T-thread and brand specific bayonet mount.	varies with bayonet	#19392

Next use the TUBE LENGTH value calculation above for the suffix. For example, nearly all C-mount cameras share a 17.5mm BACK-FOCUS value. The C-mount stock number prefix is **#19399** and the TUBE LENGTH would be equal to 105mm - 2.5mm - 17.5mm = **85mm**. The Optec stock number for a C-mount camera would therefore be **#19399-85** as shown in the table below.

NOTE: The minimum tube length is limited by the height of the OPTEC-2100 dovetail plus the press-flange of the mechanical mount (usually about 0.2" or 5mm). The standard Lepus telecompressor minimum tube length is 15mm while the Edge HD specific Lepus telecompressor is 17mm.

Reference Table of Camera-Specific Mounts

Camera Type	Tube Length (mm)	Thread	Stock No.
Any C-mount camera with standard lens mount	85	C	19399-85
Any CS-Mount Camera	90	C	19399-90
Apogee D02 Housing - U47, U77, U4000, U8300 std. body	76	SCT	19396-76
*Apogee D02 Housing - U9, U10 std. camera	75	SCT	19396-75
*Apogee D06 Housing - U6, U9, U10, U4000 camera	89	SCT	19396-89
Atik Instruments 4000/*11000	88	T	19392-88
Atik Fira M1 motorized filter wheel	83	SCT	19396-83
*Canon DSLR Camera - Canon bayonet mount	47	T plus bayonet	19392-47C
Fishcamp Starfish	91	T	19392-91
Meade Deep Sky Imager	94	T	19392-94
Meade Deep Sky Imager with RGB filter bar	77	T	19392-77
*Nikon DSLR Camera - Nikon bayonet mount	46	T plus bayonet	19392-47N
Orion StarShoot Pro	82	T	17482-82
QSI 504 full body camera with filters	67	T	19392-67
QSI 504 full body camera without filters	67	T	19392-67
QSI 504 medium body camera without filters	79	T	19392-79
QSI 504 slim body camera with filters	88	T	19392-88
QSI 516, 532 full body camera with filters	67	T	19392-67
QSI 516, 532 full body camera without filters	67	T	19392-67
QSI 516, 532 medium body camera without filters	80	T	19392-80
QSI 516, 532 slim body camera without filters	88	T	19392-88
QSI 516WSG camera with Off-Axis guider and no filters	52	T	19392-52

QSI 516WSG camera with Off-Axis guider and filters and standard T-thread. Note: T-thread mount must be turned down for clearance of the OAG.	53	T	19392-53Q
QSI 583WSG camera with Off-Axis guider STL 2.156x24tpi thread	49	STL	19398-49
QSI 520 full body camera with filters	67	T	19392-67
QSI 520 full body camera without filters	67	T	19392-67
QSI 520 medium body camera without filters	80	T	19392-80
QSI 520 slim body camera without filters	88	T	19392-88
SBIG ST-7/8/9/10/2000 with CFW-10 filter wheel mounted directly on camera without face plate and with D-block	62	T	19392-62
SBIG ST-7/8/9/10/2000 with CFW-8/8A/9 with new 0.25 inch thick front plate on camera and no D-block	59	T	19392-59
SBIG ST-7/8/9/10/2000 new 0.25 inch thick front plate and D-block with T-Thread	77	T	19392-77
SBIG ST-2000XCM with AO-8	24	T	19392-24
SBIG ST-8300	85	T	19392-85
SBIG ST-8300 with CFW5/8-8300	64	T	19392-64
*SBIG STL with 3mm thick filters	65	STL	19398-65
*SBIG STL without filters	64	STL	19398-64
*Starlight Xpress SXVF-H9 camera plus filter wheel	62	T	19392-62
Starlight Xpress SXV-H9 T-thread camera	84	T	19392-84
Starlight Xpress SXV-M25C camera	84	T	19392-84
QHY-8 camera (T-mount depth to IR Filter=0.160")	81	T (short)	19392-81
QHY-8L camera	82	T	19392-82
QHY-8Pro camera (without "tile adjust ring", add 3mm to BF for ring)	84	T	19392-84
QHY-8 camera with Orion SteadyStar	41	T	19392-40
QHY-9 camera	102	T	19392-102
QHY-9 camera with 2" color filter wheel	46	T	19392-46

QHY-10 camera	82	T	19392-82
Older Camera Mounts			
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	60	T	19392-60
SBIG ST-7/8/9/10/2000 with old 0.20-inch thick front plate on camera and D block with T-thread	78	T	19392-78

* *denotes vignetting may occur with Lepus telecompressor.*