

56 Sparta Avenue • Newton, New Jersey 07860 (973) 300-3000 Sales • (973) 300-3600 Fax www.thorlabs.com



# ESK05 - May 14, 2019

Item # ESK05 was discontinued on May 14, 2019. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

#### MECHANICAL ESSENTIALS KIT: OPTICAL MOUNTS

- Choose from Five Kits
- Heavy-Duty, Welded Steel Cabinet Frame
- Cabinet Frame Can Be Wall Mounted or Stacked
- Equipped with Easy-to-Read Labels



Assorted Optical Mounts Kit



ESK17 Ø1/2" Optical Mounts Kit

See Contents Tab for Included Items

#### **Hide Overview**

### OVERVIEW

#### **Features**

 Assorted, Ø1/2", Ø1", Ø2", or Specialty Optical Mounts Kits

- Imperial and Metric Options
- Frame Dimensions (L x W x H): 17" x 11" x 11" (432 mm x 279 mm x 279 mm)
- Drawer Dimensions (L x W x H): 10.56" x 5.19" x 3.06" (268 mm x 132 mm x 78 mm)
- · Easy-to-Read Labels List Contents for Each Drawer
- Increased Savings Over Individual Component Products

The ESK05(/M) will be retired without replacement when stock is depleted. If you require this part for line production, please contact our OEM Team.



Click to Enlarge ESK18 is shown on an RK4102 rack shelf, which is installed in an RK3884 19" rack.



Slots on the rear of the case allow for wall mounting.

These kits contain our most popular kinematic, fixed, translational, and rotational optical mounting components for various optic sizes. Refer to the *Contents* tab above for detailed information about the components included with the imperial and metric versions of each kit. Complement these kits with our ESK01 (ESK01/M) Bases and Post Holders and ESK16 (ESK16/M) Posts and Accessories Essentials Kits.

#### **Mounting Options**

The kit can be stored on a tabletop for easy, convenient access or placed on an RK4101 or RK4102 rack shelf, both of which can be installed in our RK3884 standard 19" rack. The image to the right shows an ESK18 kit as well as another custom-labeled S19909 cabinet installed in a 19" rack. The cabinet used in each Essential Series Kit features slots in the rear of the case (see image to far right) for wall mounting and features indentations on the top and four feet on the bottom for stable stacking. *Warning*: ensure that the wall and wall mounts can support the weight of each kit before mounting.

**Hide Contents** 

### CONTENTS

#### **Kit Components**

Click on the yellow bars below to view the contents of each kit. Each kit includes the listed components and an S19909 9-Drawer Cabinet. In cases where the metric and imperial kits contain parts with different item numbers, metric item numbers and measurements are indicated in parentheses.

#### ESK05 (ESK05/M) - Assorted Optical Mounts Kit

Kinematic and Rotation Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM100 Kinematic Mirror Mount for Ø1" Optics	di	10
KM100PM (KM100PM/M) Kinematic Prism Mount		2
RSP1D (RSP1D/M) Rotation Mount for Ø1" Optics with Adjustable Zero Point, One SM1RR Retaining Ring Included	0	2

Fixed Mounts and Holders		
Item # and Description	Photo (Click to Enlarge)	Quantity
FMP1 (FMP1/M) Fixed Ø1" Optical Mount	0	5
LMR1 (LMR1/M) Lens Mount for Ø1" Optics, One SM1RR Retaining Ring Included	0	5
LMR2 (LMR2/M) Lens Mount for Ø2" Optics, One SM2RR Retaining Ring Included	<b>Q</b>	3
LH1 (LH1/M) Adjustable Lens Mount: 0.2" (5 mm) to 1.82" (46 mm)	0	3
LH2 (LH2/M) Adjustable Lens Mount: 0.75" (19 mm) to 2.25" (57 mm)	0	3
SCL03		

Self-Centering Lens Mount, Ø0.15" (3.8 mm) to Ø1.7" (43 mm)	Ö	2
FH2 Filter holder For 2" Optic, Stackable		3
FP01 General Purpose Plate Holder, Holds Plates up to 5/8" Thick	<b>6</b> -	3
H45B2 45° Optic Holder, 1" Optic	3	2

Platform Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM100B (KM100B/M) 2" x 2" Kinematic Platform Mount		3
KM200B (KM200B/M) 3" x 3" Kinematic Platform Mount		2

Accessories		
Item # and Description	Photo (Click to Enlarge)	Quantity
AP90 (AP90/M) Precision Right Angle Plate		2
ID12 (ID12/M) Standard Iris, 12.0 mm Maximum Aperture	0	3
RP01 (RP01/M) Rotation Platform		2
MA45-2 45° Mounting Adapter		2

ESK17 (ESK17/M) - Ø1/2" Optical Mounts Kit

Kinematic Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM05 (KM05/M) Kinematic Mirror Mount for Ø1/2" Optics, 8-32 (M4) Taps		10
MH12 Mirror Holder for Ø1/2" Optics	9	5
KMSS (KMSS/M) Compact Kinematic Mirror Mount, Hex Adjuster, 8-32 (M4) Taps for Post Mounting	9 .	5
KM05FR (KM05FR/M) Rear-Loaded Right-Handed Clear-Quadrant Mirror Mount		5
MK05 (MK05/M) Mini-Series Kinematic Mirror Mount for Ø1/2" Optics, 4-40 (M3) Taps	O	5
KM05DR (KM05DR/M) Right-Handed Kinematic Mount for Ø1/2" D-Shaped Mirrors, 8- 32 (M4) Taps		3
KM05CP (KM05CP/M) Kinematic Mirror Mount for Ø1/2" Optics with Post-Centered Front Plate, 8-32 (M4) Taps		5
KS05 (KS05/M) Ø1/2" Precision Kinematic Mirror Mount, 3 Adjusters, 8-32 (M4) Taps	0110	4
KS05T (KS05T/M) SM05-Threaded Precision Kinematic Mirror Mount for Ø1/2" Optics, 3 Adjusters, 8-32 (M4) Taps	0,0	4

Fixed Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
LMR05 (LMR05/M) Lens Mount with Retaining Ring for Ø1/2" Optics, 8-32 (M4) Tap	80	5
FMP05 (FMP05/M) Fixed Ø1/2" Mirror Mount, 8-32 (M4) Tap		5

H45A 45° Mirror Mount for Ø1/2" Optics	2
TR05F90 (TR05F90/M) 90° Flip Mount for Ø1/2" Filters and Optics, 8-32 (M4) Tap	3
DMM05 (DMM05/M) Fixed Mount for Ø1/2" D-Shaped Mirrors	3

Rotation and Translation Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KS05RS Kinematic Rotation Mount for Ø1/2" Optics		2
PRM05 (PRM05/M) High-Precision Rotation Mount for Ø1/2" (12.5 mm) Optics		2
CXYZ05 (CXYZ05/M) XYZ Translation Mount for Ø1/2" Optics, 8-32 (M4) Taps		1
RSP05 (RSP05/M) Rotation Mount for Ø1/2" (Ø12.7 mm) Optics, 8-32 (M4) Tap	0	2
LM05XY (LM05XY/M)  Translating Lens Mount for Ø1/2" Optics, 1 Retaining Ring Included, 8-32 (M4) Tap	•	3

Accessories		
Item # and Description	Photo (Click to Enlarge)	Quantity
SS8N013 8-32 Stainless Steel Nylon-Tipped Setscrew, 1/8" Long, Pack of 10	<b>8</b>	1
HKTS-5/64		

5/64" (2 mm) Hex Key Thumbscrew, Pack of 4	<b>P</b>	1
SPW603 Spanner Wrench for SM05-Threaded Retaining Rings, Length = 1.00"	9	1
AP8E4E (AP4M3M) Adapter with External 8-32 (M4) Threads and External 4-40 (M3) Threads	•	5

## ESK18 (ESK18/M) - Ø1" Optical Mounts Kit

Kinematic Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM100 Kinematic Mirror Mount for Ø1" Optics	Q.	8
MH25 Mirror Holder for Ø1" Optics 2.5 - 6.1 mm Thick	0	4
KMSS (KMSS/M) Compact Kinematic Mirror Mount, Hex Adjuster, 8-32 (M4) Taps for Post Mounting	9 .	4
KM1CE Ø1" Clear-Edge Kinematic Mirror Mount, 2 Adjusters		4
KM100CP (KM100CP/M) Kinematic Mirror Mount for Ø1" Optics with Post-Centered Front Plate, 8-32 (M4) Taps		4
KM100D Right-Handed Kinematic Mount for Ø1" D-Shaped Mirrors		4
KS1 Ø1" Precision Kinematic Mirror Mount, 3 Adjusters	9	4
KS1T SM1-Threaded Precision Kinematic Mirror Mount for Ø1" Optics, 3 Adjusters	OI	4
	244.960	

K5X1 5-Axis Locking Kinematic Mount for Ø1" Optics		2
K6XS 6-Axis Locking Kinematic Optic Mount	0	1

Fixed Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
FMP1 (FMP1/M) Fixed Ø1" Mirror Mount, 8-32 (M4) Tap	0	5
LMR1 (LMR1/M) Lens Mount with Retaining Ring for Ø1" Optics, 8-32 (M4) Tap	<b>Q</b> 0	5
NX1N (NX1N/M) 16-Position Indexing Mount for Ø1" Optics, 8-32 Taps		3
H45 45° Mirror Mount for Ø1" Optics		2
TRF90 (TRF90/M) 90° Flip Mount for Ø1" Filters and Optics, 8-32 (M4) Tap		3
DMM1 (DMM1/M) Fixed Mount for Ø1" D-Shaped Mirrors	4	5

Rotation and Translation Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
RSP1 (RSP1/M) Rotation Mount for Ø1" (25.4 mm) Optics, 8-32 (M4) Tap	0	2
PRM1 (PRM1/M) High-Precision Rotation Mount for Ø1" (25.4 mm) Optics		2
LM1-A		

Rotating Inner Carriage for Ø1" Optics, One SM1RR Retaining Ring	0	3
LM1-B (LM1-B/M) Rotation Mounting Ring for LM1-A Ø1" Optic Carriage, 8-32 (M4) Tap	Ò	3
ST1XY-S (ST1XY-S/M) XY Translator with Micrometer Drives	10	1
LM1XY (LM1XY/M) Translating Lens Mount for Ø1" Optics, 1 Retaining Ring Included	<b>O</b>	2

Accessories		
Item # and Description	Photo (Click to Enlarge)	Quantity
KB1P (KB1P/M) Magnetic Quick-Release Carriage Set, 8-32 (M4) Tap	0	3
SS8N013 8-32 Stainless Steel Nylon-Tipped Setscrew, 1/8" Long, Pack of 10	8	1

## ESK19 (ESK19/M) - Ø2" Optical Mounts Kit

Kinematic Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM200 Kinematic Mirror Mount for Ø2" Optics	Q	4
KM2CE Ø2" Clear-Edge Kinematic Mirror Mount, 2 Adjusters		5
KM200CP (KM200CP/M) Kinematic Mirror Mount for Ø2" Optics with Post-Centered Front Plate, 8-32 (M4) Taps	Q	4
KS2D Ø2" Kinematic Mirror Mount, 2 Differential Adjusters, 1 1/4"-80 Adjuster	Q	4

KS2T SM2-Threaded Precision Kinematic Mirror Mount for Ø2" Optics, 3 Adjusters



2

Rotation and Translation Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KS2RS Kinematic Rotation Mount for Ø2" Optics	0	2
LM2-A Rotating Inner Carriage for Ø2" Optics, One SM2RR Retaining Ring	0	3
LM2-B (LM2-B/M) Rotation Mounting Ring for LM2-A Ø2" Optic Carriage, 8-32 (M4) Tap	Ò	3
PRM2 (PRM2/M) High-Precision Rotation Mount for Ø2" (50.8 mm) Optics	0	2
RSP2 (RSP2/M) Rotation Mount for Ø2" (Ø50.8 mm) Optics, 8-32 (M4) Tap	0	2
LM2XY (LM2XY/M) Translating Lens Mount for Ø2" Optics, 1 Retaining Ring Included	O	2

Fixed Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
LMR2 (LMR2/M) Lens Mount with Retaining Ring for Ø2" Optics, 8-32 (M4) Tap	<b>Q</b>	5
FMP2 (FMP2/M) Fixed Ø2" Mirror Mount, 8-32 (M4) Tap	Q	5
TR2F90 (TR2F90/M) 90° Flip Mount for Ø2" Filters and Optics, 8-32 (M4) Tap	0	3
H45CN		

45° Mount for Ø2" Optics



## ESK23 (ESK23/M) - Specialty Optical Mounts Kit

Kinematic Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM100PM (KM100PM/M) Kinematic Prism Mount, 1.00" Deep, 6-32 (M4) Taps		2
KM200PM (KM200PM/M) Kinematic Prism Mount, 2.10" Deep, 6-32 (M4) and 8-32 (M4) Taps		2
KM100C Kinematic Mount for up to 1.3" (33 mm) Tall Rectangular Optics, Right Handed		2
KM100S Kinematic Mount for 1" (25.4 mm) Tall Rectangular Optics, Right Handed	To the second	1

Fixed Mounts and Holders		
Item # and Description	Photo (Click to Enlarge)	Quantity
RFM90 90° Flip Mount for Ø1" (Ø25 mm) and Rectangular Filters and Optics		2
LH1 (LH1/M) Adjustable Lens Mount: Ø0.28" (Ø7.1 mm) to Ø1.80" (Ø45.7 mm), 8-32 (M4) Tap	0	2
LH2 (LH2/M) Adjustable Lens Mount: Ø0.77" (Ø19.6 mm) to Ø2.28" (Ø57.9 mm), 8-32 (M4) Tap	0	2
SCL03 (SCL03/M) Self-Centering Lens Mount, Ø0.15" (Ø3.8 mm) to Ø1.77" (Ø45.0 mm), 8-32 (M4) Tap	Ö	2
PC2 (PC2/M) Compact Flexure Plate Clamp, 1/4"-20 (M6) Tap	•	3

FP01 Plate Holder, 0.9" Wide, Holds Plates up to 0.58" Thick		2
DH1 (DH1/M) Compact Dual Filter Holder, 8-32 (M4) Tap	3	2
FH2 Filter Holder, Stackable		2
SFH2 Quick-Release Rectangular Filter Holder		2

Platform Mounts		
Item # and Description	Photo (Click to Enlarge)	Quantity
KM100B (KM100B/M) 1.92" x 1.92" Kinematic Platform Mount		3
KM200B (KM200B/M) 3.01" x 3.01" Kinematic Platform Mount		2
BSH1 (BSH1/M) Platform Mount for 1" or 25.0 mm Beamsplitters and Right-Angle Prisms, 8-32 (M4) Tap		3
FP90 (FP90/M) Adjustable Flip Platform, 8-32 (M4) Taps	0)	2

Clamps and Clamping Arms			
Item # and Description	Photo (Click to Enlarge)	Quantity	
VG100 (VG100/M) Adjustable-Height Optics Clamp	1	2	
VC3C (VC3C/M) Large V-Clamp with PM4 Clamping Arm, 2.5" Long		2	
PM4 (PM4/M)			

Large Adjustable Clamping Arm, 6-32 (M4) Threaded Post



Adapters				
Item # and Description	Photo (Click to Enlarge)	Quantity		
FM90 (FM90/M) Flip Mount Adapter		2		
KGM40 Kinematic Grating Mount Adapter (Grating Height: 20-40 mm)	4	2		
PCMP (PCMP/M) Flat Base Adapter for PCM(/M) Mount, 1/4"-20 (M6) Threaded Stud	POM	2		
PCMV (PCMV/M) V-Groove Base Adapter for PCM(/M) Mount, 1/4"-20 (M6) Threaded Stud	POW	2		
PCM (PCM/M) Post Clamp Mount for Ø1/2" (12.7 mm) Posts (Base Adapter Sold Separately)		4		

Translation Mount			
Item # and Description	Photo (Click to Enlarge)	Quantity	
XYF1 (XYF1/M) XY Mount for 1/2" - 3" Rectangular Optics, 8-32 (M4) Taps		2	

Hide Smart Pack

## SMART PACK

#### **Smart Pack**

- Reduce Weight of Packaging Materials
- Increase Usage of Recyclable Packing Materials
- · Improve Packing Integrity
- Decrease Shipping Costs

Thorlabs' Smart Pack Initiative is aimed at waste minimization while still maintaining adequate protection for our products. By eliminating any unnecessary packaging, implementing packaging design changes, and utilizing eco-friendly packaging materials for our customers when possible, this initiative seeks to improve the environmental impact of our product packaging. Products listed





	% Weight	CO <sub>2</sub> -Equivalent	
Item #	Reduction	Reduction <sup>a</sup>	
ESK05	83.10%	87.67 kg	
ESK05/M	83.10%	96.59 kg	

above are now shipped in re-engineered packaging that minimizes

the weight and the use of non-recyclable materials. b As we move through our product line, we will indicate re-engineered packages with our Smart Pack logo.

- a. Travel-based emissions reduction calculations are estimated based on the total weight reduction of packaging materials used for all of 2013's product sales, traveling 1,000 miles on an airplane, to provide general understanding of the impact of packaging material reduction. Calculations were made using the EPA's shipping emissions values for different modes of transport.
- b. Some Smart Pack products may show a negative weight reduction percentage as the substitution of greener packaging materials, such as the Greenwrap, at times slightly increases the weight of the product packaging.

#### Hide Optical Mounts Kits

#### **Optical Mounts Kits**

Part Number	Description	Price	Availability
ESK05/M	Assorted Optical Mounts Essentials Kit, Metric and Universal Components, 57 Pieces	\$2,640.81	5-8 Days
ESK17/M	NEW! Ø1/2" Optical Mounts Essentials Kit, Metric and Universal Components, 82 Pieces	\$4,410.00	Today
ESK18/M	NEW! Ø1" Optical Mounts Essentials Kit, Metric and Universal Components, 79 Pieces	\$5,130.00	Today
ESK19/M	NEW! Ø2" Optical Mounts Essentials Kit, Metric and Universal Components, 48 Pieces	\$4,600.00	Today
ESK23/M	NEW! Specialty Optical Mounts Essentials Kit, Metric and Universal Components, 56 Pieces	\$3,600.00	Today
ESK05	Assorted Optical Mounts Essentials Kit, Imperial and Universal Components, 57 Pieces	\$2,640.81	Lead Time
ESK17	NEW! Ø1/2" Optical Mounts Essentials Kit, Imperial and Universal Components, 82 Pieces	\$4,410.00	Today
ESK18	NEW! Ø1" Optical Mounts Essentials Kit, Imperial and Universal Components, 79 Pieces	\$5,130.00	Today
ESK19	NEW! Ø2" Optical Mounts Essentials Kit, Imperial and Universal Components, 48 Pieces	\$4,600.00	Today
ESK23	NEW! Specialty Optical Mounts Essentials Kit, Imperial and Universal Components, 56 Pieces	\$3,600.00	Today