

RAPTOR

CINE LENSES



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IB/E OPTICS GMBH- PASSAUER STRASSE 13/ 94078 FREYUNG/ GERMANY  
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# ABOUT US

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IB/E OPTICS IS YOUR PREMIER PARTNER FOR BESPOKE DESIGN AND MANUFACTURING OF OPTICS, ILLUMINATION SYSTEMS AND MACHINE VISION APPLICATIONS IN INDUSTRY AND CINEMA.

WE HAVE BEEN DELIVERING QUALITY PRODUCTS AND SERVICE TO THE INDUSTRY'S PROFESSIONALS SINCE 1992. FULLY EQUIPPED WITH THE LATEST TECHNOLOGY, WE OFFER FULL LIFECYCLE PROGRAM MANAGEMENT, FROM BEGINNING TO END WITH A SINGLE POINT OF ACCOUNTABILITY. WITH OUR POWERFUL TEAM OF EXPERTS, YOU CAN BE REST ASSURED THAT YOUR PROJECT IS IN GOOD HANDS AND IS PROGRESSING SMOOTHLY.

IN ADDITION TO CUSTOM-MADE OPTICS, LENS SERVICING AND CONVERSIONS, WE ALSO MANUFACTURE A COMPREHENSIVE ASSORTMENT OF OUR OWN HIGH-QUALITY OPTICS, CONVERTERS, EXPANDERS, UNIVERSAL CAMERA MOUNTS AND OTHER GEAR.

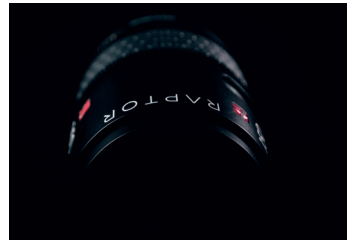
AS A FAMILY-OWNED COMPANY, IT IS OUR GOAL TO CONTINUE OUR TRADITION OF PRECISION, MEETING AND EXCEEDING OUR CUSTOMERS' EXPECTATIONS AND TO ADVANCE THE WORLD OF OPTICS IN FILM AND BROADCAST INDUSTRY.

CONTENTS

RAPTOR LARGE FORMAT MACRO LENS		
—— RAPTOR MACRO 60 mm/T2.9	——	10
RAPTOR LARGE FORMAT - PERFORMANCE		
—— RAPTOR MACRO 60 mm/T2.9	——	11
RAPTOR LARGE FORMAT MACRO LENS		
—— RAPTOR MACRO 100 mm/T2.9	——	12
RAPTOR LARGE FORMAT - PERFORMANCE		
—— RAPTOR MACRO 100 mm/T2.9	——	13
RAPTOR LARGE FORMAT MACRO LENS		
—— RAPTOR MACRO 150 mm/T2.9	——	14
RAPTOR LARGE FORMAT - PERFORMANCE		
—— RAPTOR MACRO 150 mm/T2.9	——	15
RAPTOR LARGE FORMAT MACRO LENS		
—— RAPTOR MACRO 180 mm/T2.9	——	16
RAPTOR LARGE FORMAT - PERFORMANCE		
—— RAPTOR MACRO 180 mm/T2.9	——	17
RAPTOR - OPTICAL TOOLS		
—— VELOCITER x0.8	——	18
—— VVx2	——	22
—— COMPATIBILITY TABLE	——	24



RAPTOR



## RAPTOR LARGE FORMAT MACRO LENS

The movement toward larger format sensors is in progress, and the number of large format cameras available keeps growing and includes the ALEXA LF, ALEXA 65, Sony VENICE, RED MONSTRO 8K VV, Panavision Millennium DXL2 and others. Larger sensors deliver a film-style look with interesting bokeh due to their very shallow depth of field and require lenses that can cover the complete area. Our RAPTOR Large Format Macro Lens Set is up to the task.

All four RAPTOR lenses easily cover  $\varnothing$  50mm with a PL mount. The 100 mm/T2.9, 150 mm/T2.9 and 180 mm/T2.9 will even cover up to  $\varnothing$  55mm with an XPL mount. All lenses have 1:1 magnification, a T-Stop of 2.9 and professional cine mechanics.

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THE SET CONSISTS OF FOUR FOCAL

LENGTHS:

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Raptor Macro 60 mm/T2.9

Raptor Macro 100 mm/T2.9

Raptor Macro 150 mm/T2.9

Raptor Macro 180 mm/T2.9



## FEATURES

Maximum Magnification 1:1

Internal Focusing (Constant Lens Length)

Extended Color Correction (APO)

T-Stop 2.9 for all Focal Lengths

Consistent Distance from Flange to Iris and Focus Ring

95 mm Front Diameter

M0.8 Gear Wheels for Focus and Iris Control

UMS PL Mount (LPL, Canon EF, Sony NEX E, etc.)

Robust Mechanical Design





## RAPTOR 60MM

Magnification	1:1
Aperture	T 2.9 - T 22
Max. Aperture Infinity / Near	T 2.9 - T 5.3
Close Focus	19.0 cm / 7.5"
Min. Working Distance	3.2 cm / 1.26"
Focus Rotation	320°
Iris Rotation	60°
No. Iris Blades	9
Max. Image Diameter ø (PL Mount)	50 mm / 1.97"
Mount	PL UMS
Length (Flange to Front)	106 mm / 4.17"
Front Diameter (mm)	95 mm / 3.74"
Weight (kg)	1.15 kg / 2.54 lbs

## RAPTOR 60 MM



ILLUMINATION VS. IMAGE HEIGHT

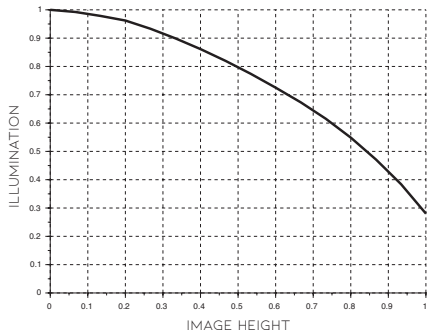
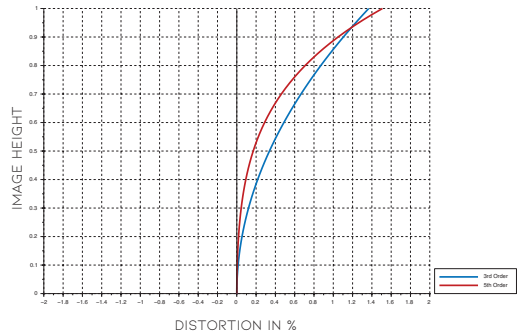
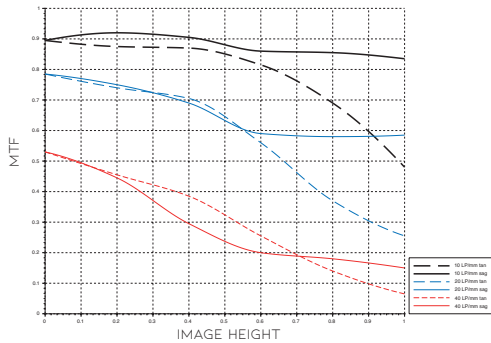


IMAGE HEIGHT VS. DISTORTION



MTF VS. IMAGE HEIGHT



PERFORMANCE DATA COLLECTED BY IB/E LABORATORY.

RAPTOR 100MM

Magnification	1:1
Aperture	T 2.9 - T 22
Max. Aperture Infinity / Near	T 2.9 - T 5.3
Close Focus	31.2 cm / 12.3"
Min. Working Distance	11.5 cm / 4.53"
Focus Rotation	320°
Iris Rotation	60°
No. Iris Blades	9
Max. Image Diameter $\varnothing$ (PL Mount)	50 mm / 1.97"
Mount	PL UMS
Length (Flange to Front)	150 mm / 5.91"
Front Diameter (mm)	95 mm / 3.74"
Weight (kg)	1.55 kg / 3.42 lbs

RAPTOR 100 MM



ILLUMINATION VS. IMAGE HEIGHT

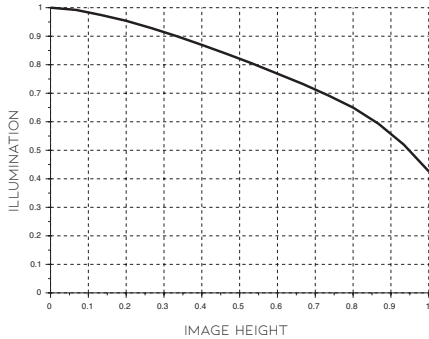
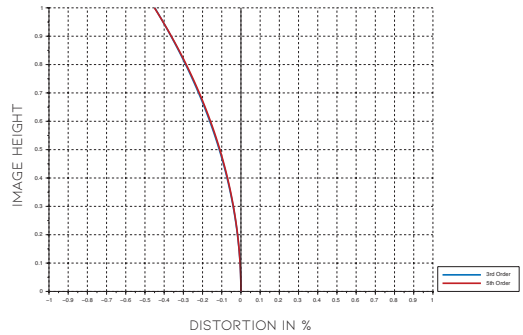
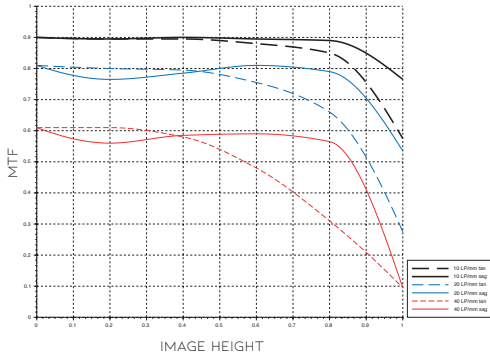


IMAGE HEIGHT VS. DISTORTION



MTF VS. IMAGE HEIGHT



PERFORMANCE DATA COLLECTED BY IB/E LABORATORY.

RAPTOR 150MM

Magnification	1:1
Aperture	T 2.9 - T 22
Max. Aperture Infinity / Near	T 2.9 - T 5.3
Close Focus	38.0 cm / 15"
Min. Working Distance	18.3 cm / 7.20"
Focus Rotation	320°
Iris Rotation	60°
No. Iris Blades	9
Max. Image Diameter $\varnothing$ (PL Mount)	50 mm / 1.97"
Mount	PL UMS
Length (Flange to Front)	150 mm / 5.91"
Front Diameter (mm)	95 mm / 3.74"
Weight (kg)	1.76 kg / 3.88 lbs

RAPTOR 150 MM



ILLUMINATION VS. IMAGE HEIGHT

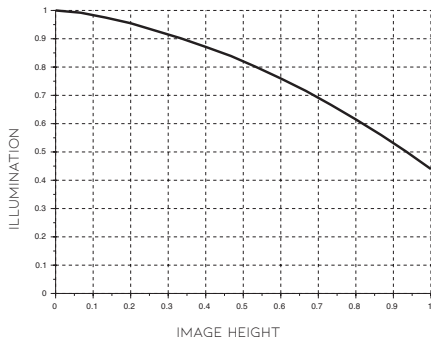
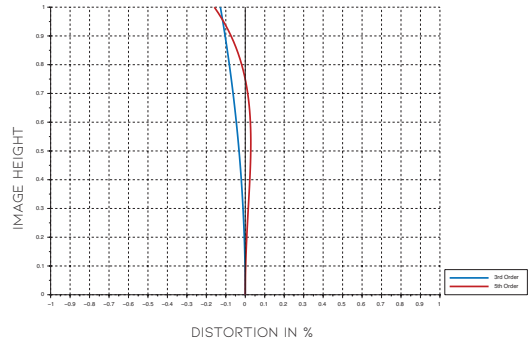
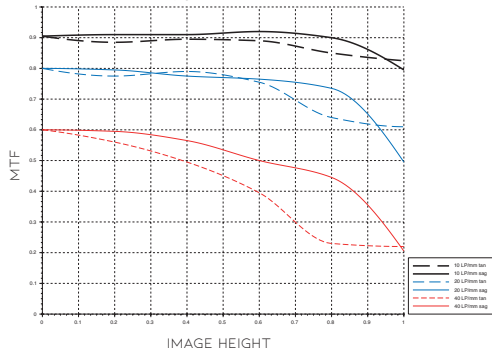


IMAGE HEIGHT VS. DISTORTION



MTF VS. IMAGE HEIGHT



PERFORMANCE DATA COLLECTED BY IB/E LABORATORY.

RAPTOR 180MM

Magnification	1:1
Aperture	T 2.9 - T 22
Max. Aperture Infinity / Near	T 2.9 - T 5.3
Close Focus	47.0 cm / 18.5"
Min. Working Distance	21.8 cm / 8.58"
Focus Rotation	320°
Iris Rotation	60°
No. Iris Blades	9
Max. Image Diameter $\varnothing$ (PL Mount)	50 mm / 1.97"
Mount	PL UMS
Length (Flange to Front)	193 mm / 7.60"
Front Diameter (mm)	95 mm / 3.74"
Weight (kg)	2.48 kg / 5.47 lbs

RAPTOR 180 MM





ILLUMINATION VS. IMAGE HEIGHT

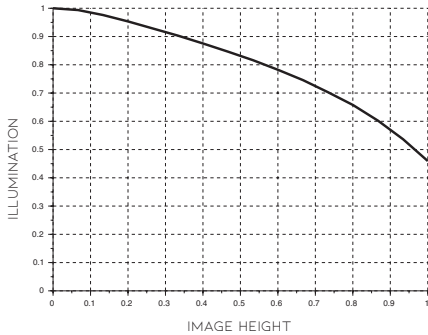
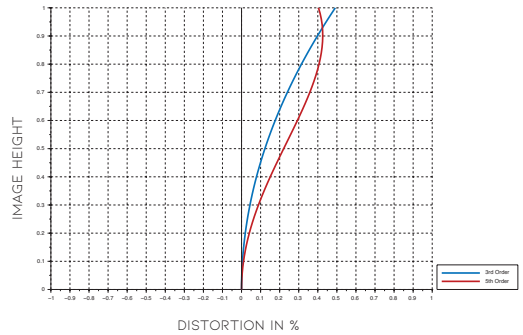
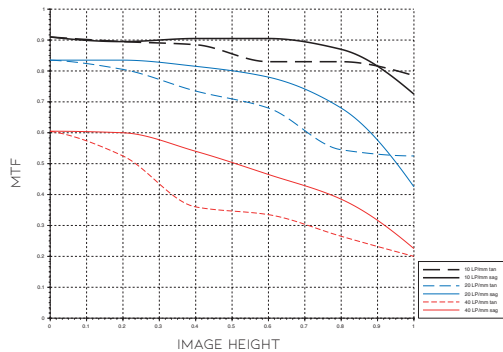


IMAGE HEIGHT VS. DISTORTION



MTF VS. IMAGE HEIGHT



PERFORMANCE DATA COLLECTED BY IB/E LABORATORY.

The Velociter x0.8 optical rear attachment reduces the focal length of the RAPTOR Macro Lenses by 0.8 and simultaneously increases the lens speed by almost one stop. It does this by concentrating the light from the full-frame sensor onto the S35 sensor. For example, the RAPTOR 100 mm/T2.9 becomes a 80 mm/T2.3.

# VELOCITER

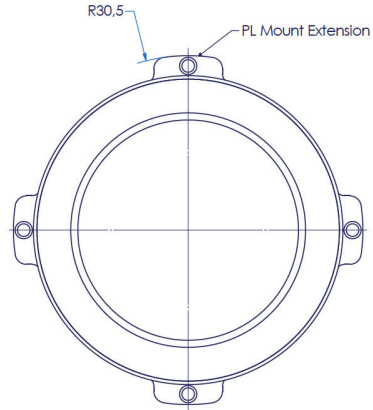
Even though the image diameter is reduced by a factor of 0.8, sensors up to the RED DRAGON 6K FF or ANSI S35 Silent can still be covered. The Velociter x0.8 can easily be installed in place of the extension tube of the PL UMS Mount without re-shimming. With the converter connected to the lens, only PL cameras can be used. (Not compatible with RAPTOR 60mm).

VELOCITER x0.8



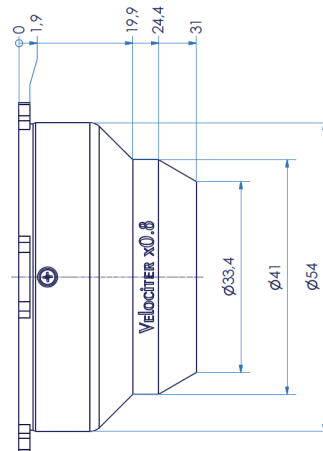
VELOCITER





## TECHNICAL DATA

Max. Image Diameter (mm)	36.0
Magnification	x0.8
Max. Input T-Stop	2.9
Light Drop (Stops)	1.0
Diameter (mm)	54.0
Length (mm)	31.0
Weight (kg)	0.18



The VVx2 UMS optical extender doubles the focal length of the RAPTOR Macro Lenses. It features high-index, low-dispersion glass as well as multi-layer coatings to ensure the highest possible resolution and contrast with minimal optical degradation. By magnifying the image twofold, the transmitted light is spread over a larger area, decreasing the brightness by two stops.

# VVx2

The VVx2 UMS is designed to mount to any digital cinema camera with a native PL mount. In addition, the IB/E UMS Mount System offers the ability to change the mount to Sony E, Canon EF, ARRI LPL and other systems in the field without re-shimming. (Not compatible with RAPTOR 60mm).

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## TECHNICAL DATA

Max. Image Diameter (mm)	52.0
Magnification	x2
Max. Input T-Stop	2.9
Light Drop (stops)	2.0
Diameter (mm)	75.0
Length (mm)	51.8
Weight (kg)	0.4





RAPTOR 100	RAPTOR 150	RAPTOR 180	RAPTOR 100	RAPTOR 150	RAPTOR 180
+ VELOCITER x0.8			+ VVx2 UMS		
80 MM	120 MM	144 MM	200 MM	300 MM	360 MM
1:1			2:1		
T 2.3			T 5.8		
36 MM / 1.42"			50 MM / 1.97"		
150 MM / 5.91"		193 MM / 7.60"	202 MM / 7.95"		245 MM / 9.65"
1.73 KG / 3.81 LBS	1.94 KG / 4.28 LBS	2.66 KG / 5.86 LBS	1.95 KG / 4.30 LBS	2.16 KG / 4.76 LBS	2.88 KG / 6.35 LBS





