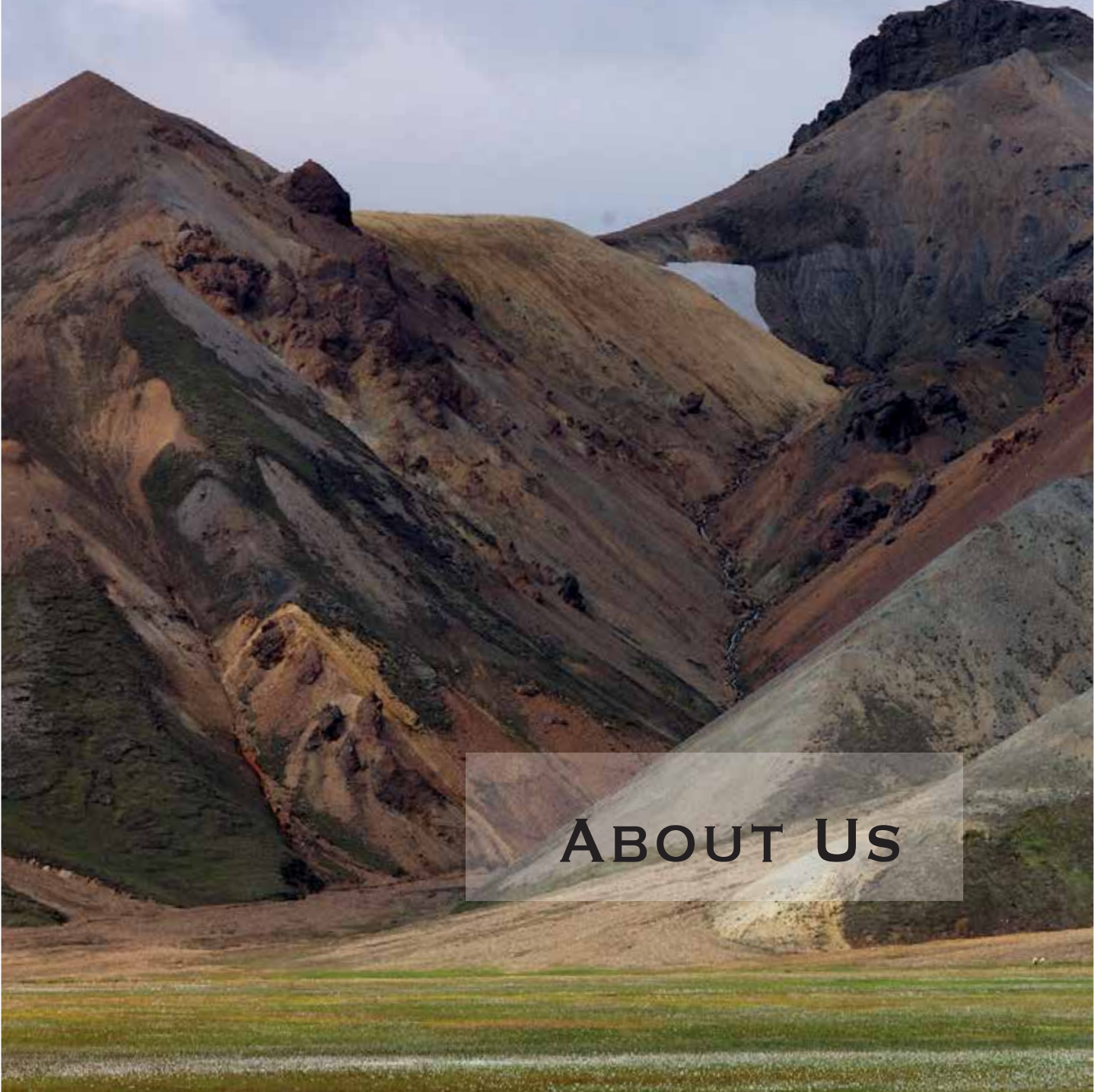
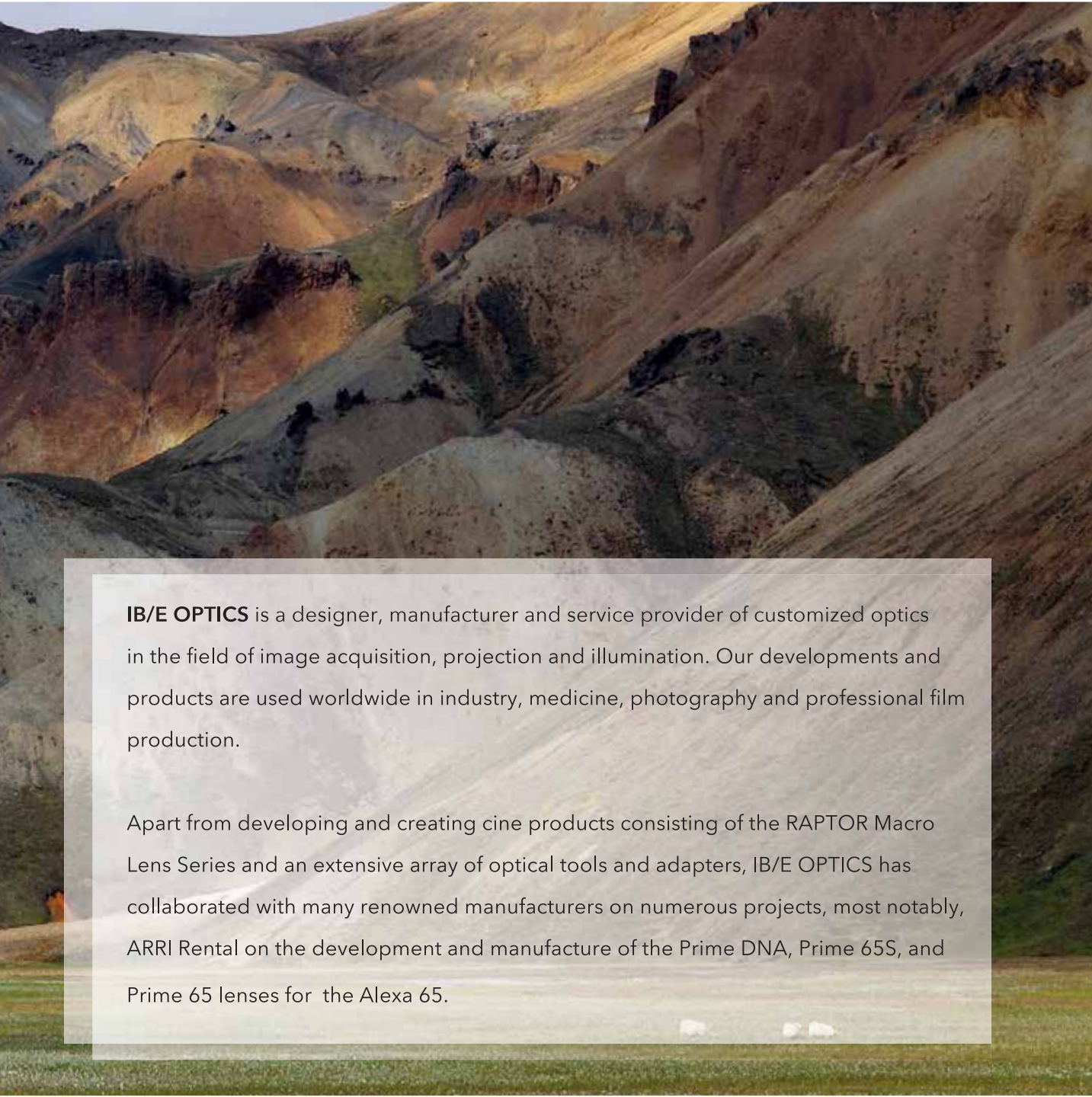
RAPTOR

Cine Lenses



About Us



IB/E OPTICS is a designer, manufacturer and service provider of customized optics in the field of image acquisition, projection and illumination. Our developments and products are used worldwide in industry, medicine, photography and professional film production.

Apart from developing and creating cine products consisting of the RAPTOR Macro Lens Series and an extensive array of optical tools and adapters, IB/E OPTICS has collaborated with many renowned manufacturers on numerous projects, most notably, ARRI Rental on the development and manufacture of the Prime DNA, Prime 65S, and Prime 65 lenses for the Alexa 65.

Content

RAPTOR LARGE FORMAT MACRO LENSES

THE MOVEMENT TOWARD LARGER FORMAT SENSORS

The Movement toward Larger format sensors

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.

The set consists of four focal lengths:

Raptor Macro 60 mm/T2.9

Raptor Macro 100 mm/T2.9

Raptor Macro 150 mm/T2.9

Raptor Macro 180 mm/T2.9

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

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

TECHNICAL SPECIFICATIONS RAPTOR 60 MM

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	95 mm / 3.74''
Weight	1.15 kg / 2.54 lbs

TECHNICAL SPECIFICATIONS RAPTOR 100 MM

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 ø (PL Mount)	50 mm / 1.97“
Mount	PL UMS
Length (Flange to Front)	150 mm / 5.91“
Front Diameter	95 mm / 3.74“
Weight	1.55 kg / 3.42 lbs

TECHNICAL SPECIFICATIONS RAPTOR 150 MM

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 ø (PL Mount)	50 mm / 1.97''
Mount	PL UMS
Length (Flange to Front)	150 mm / 5.91''
Front Diameter	95 mm / 3.74''
Weight	1.76 kg / 3.88 lbs

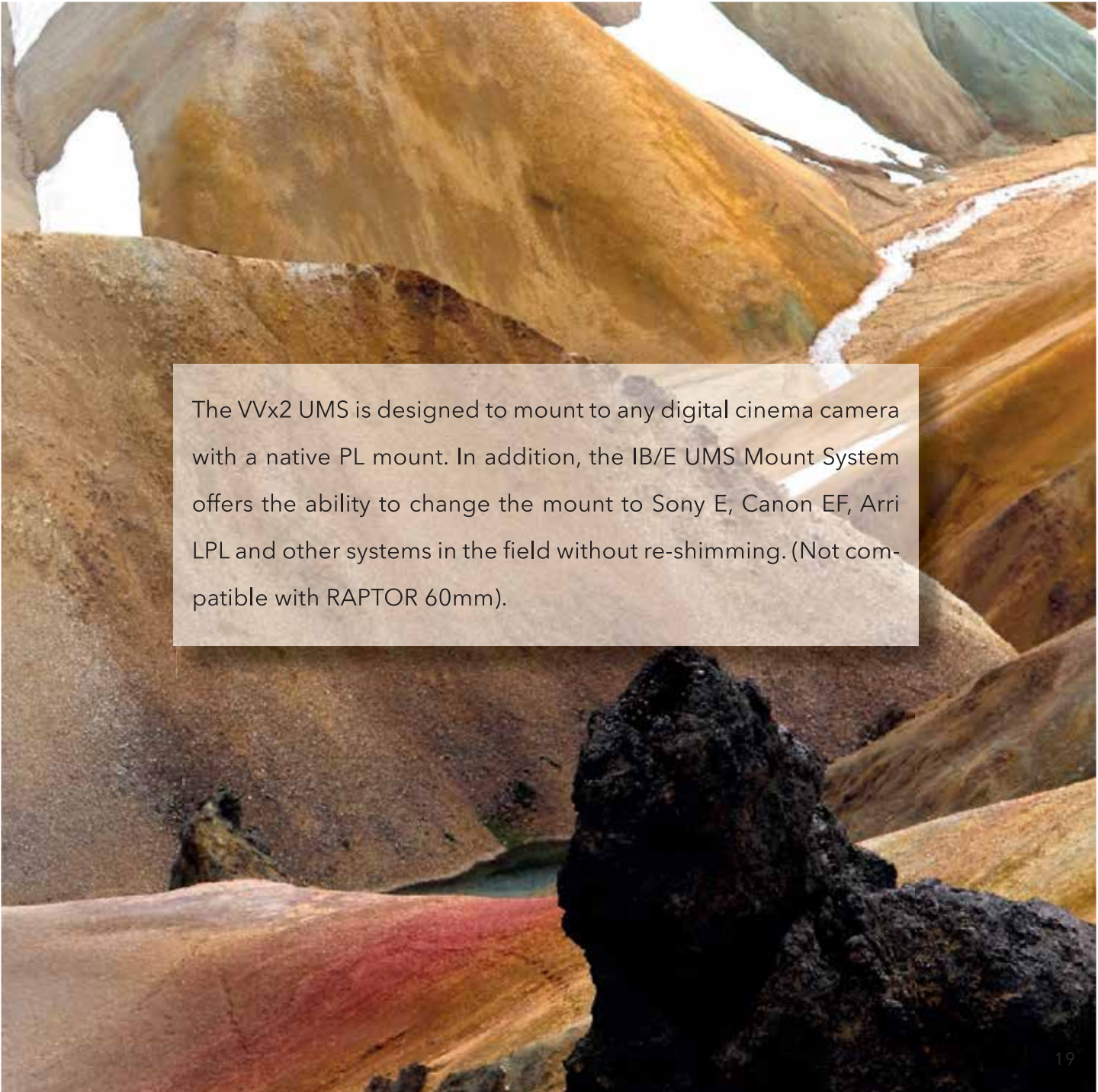
TECHNICAL SPECIFICATIONS RAPTOR 180 MM

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 ø (PL Mount)	50 mm / 1.97''
Mount	PL UMS
Length (Flange to Front)	193 mm / 7.60''
Front Diameter	95 mm / 3.74''
Weight	2.48 kg / 5.47 lbs

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.

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).

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.



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).


VELOCITER x0.8
VVx2

ILLUMINATION VS. IMAGE HEIGHT

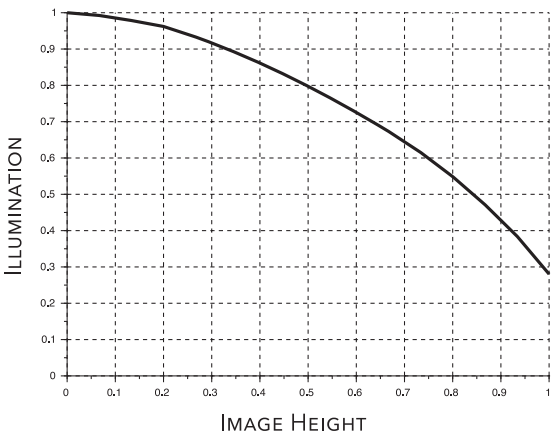
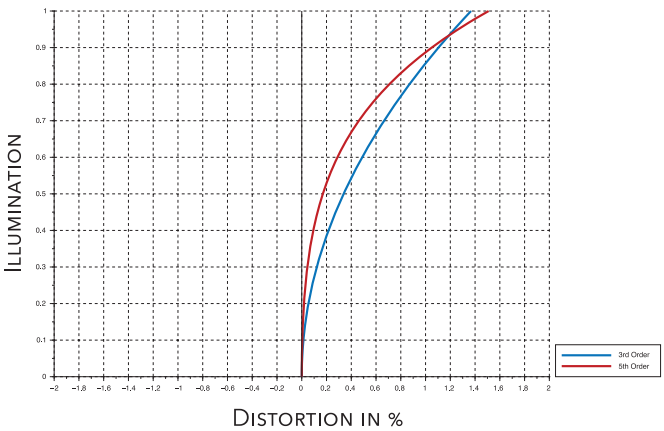


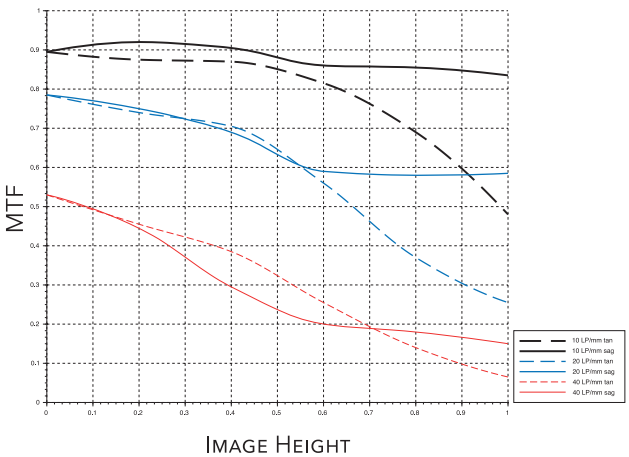
IMAGE HEIGHT VS. DISTORTION



PERFORMANCE

DATA COLLECTED BY IB/E LABORATORY.

MTF VS. IMAGE HEIGHT



ILLUMINATION VS. IMAGE HEIGHT

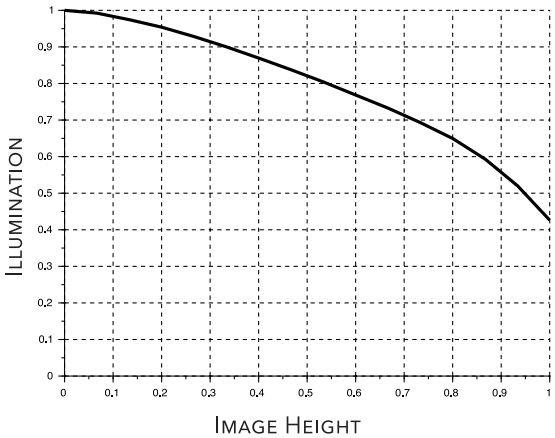
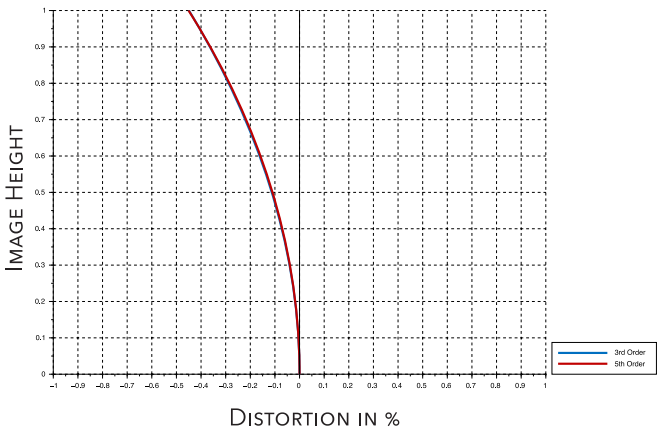


IMAGE HEIGHT VS. DISTORTION



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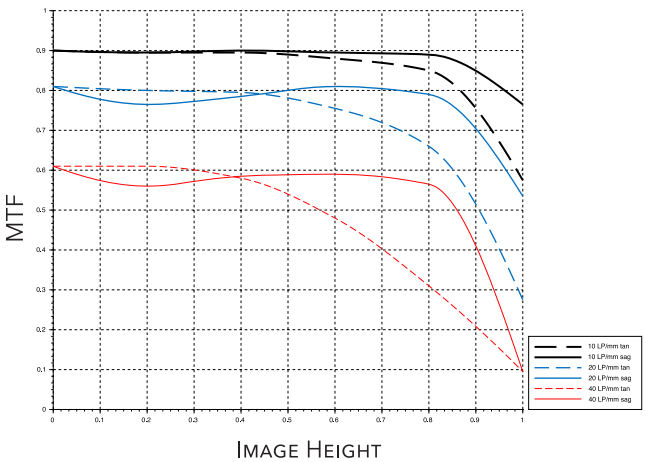

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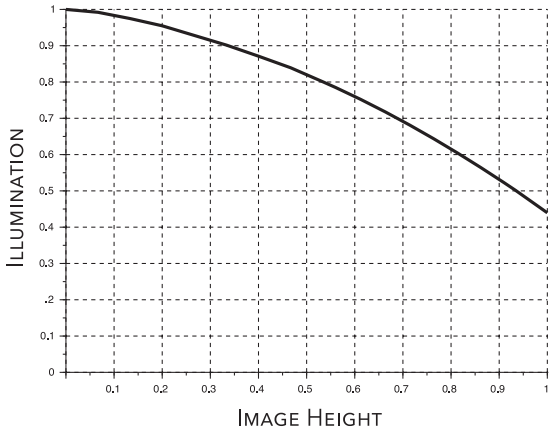
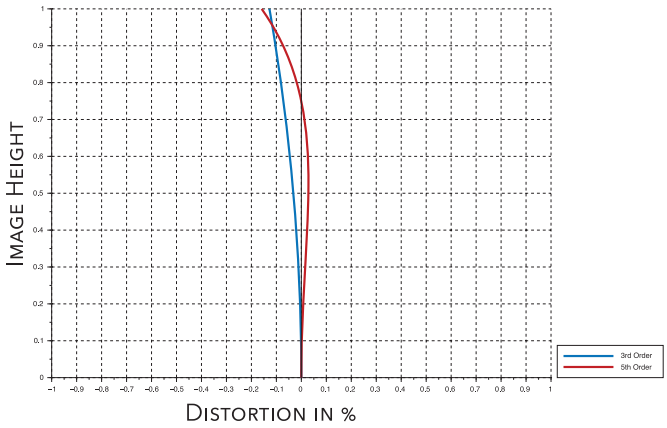


IMAGE HEIGHT VS. DISTORTION



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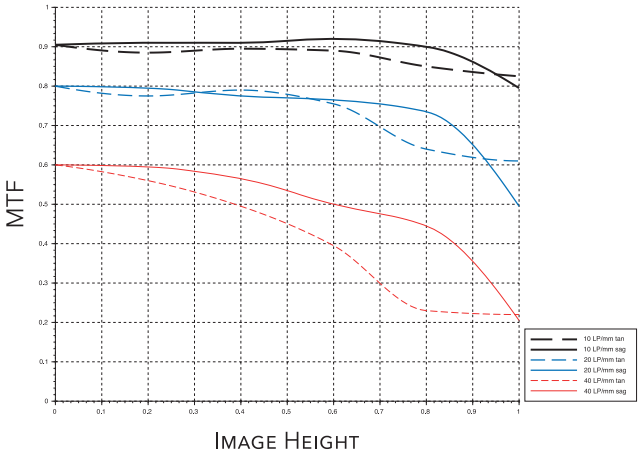

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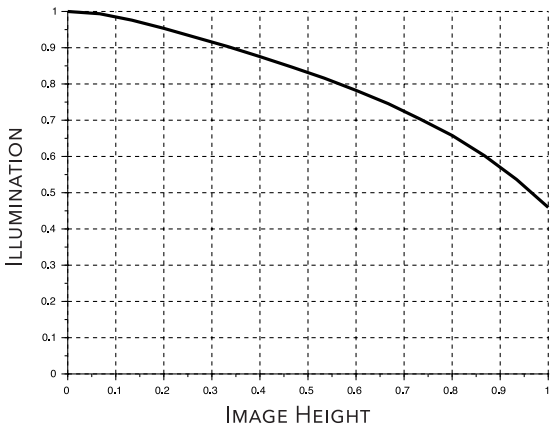
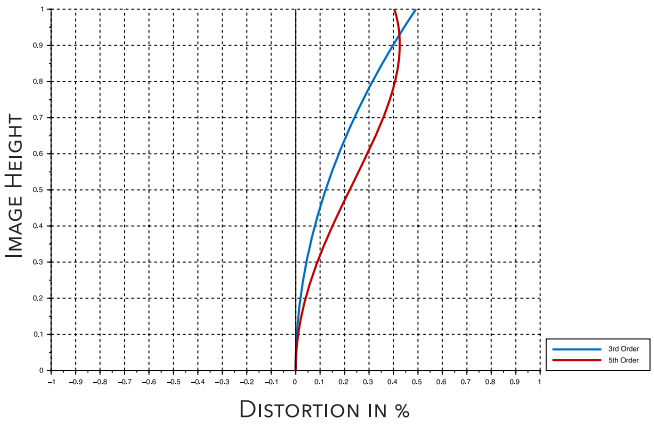


IMAGE HEIGHT VS. DISTORTION



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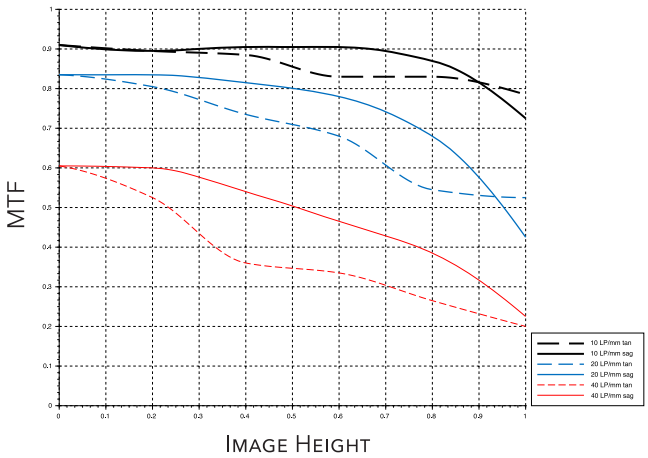

PERFORMANCE

DATA COLLECTED BY IB/E LABORATORY.


RAPTOR
150
60

OVERVIEW MACRO LENS SET

	RAPTOR 60	RAPTOR 100	RAPTOR 150	RAPTOR 180
Focal Length	60 mm	100 mm	150 mm	180 mm
Magnification	1:1			
Maximum Aperture	T 2.9			
Maximum Image Diameter	50 mm / 1.97"			
Length (Flange to Front)	106 mm / 4.17"	150 mm / 5.91"		193 mm / 7.60"
Weight	1.15 kg / 2.54 lbs	1.55 kg / 3.42 lbs	1.76 kg / 3.88 lbs	2.48 kg / 5.47 lbs