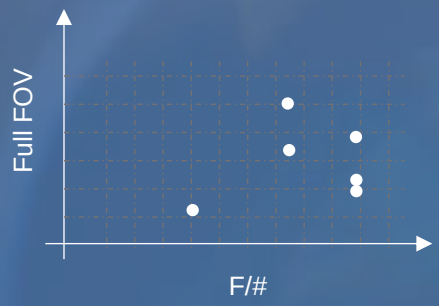
Sunex

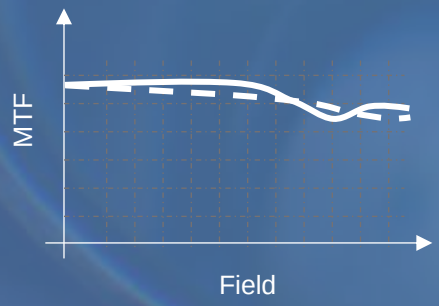
Excellence in Optical Design and Manufacturing

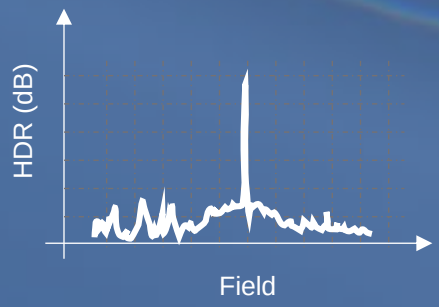
Large Format Lenses

25+ year track record of success in taking customer concepts from design through mass production.

sunex.com







All graphs are for illustration purpose only. The individual lens performance can be different.

Sunex Large Format Lenses

Image Quality

High-resolution (up to 100MP) lenses provide superior image quality by delivering exceptional clarity and detail, even in high-speed, dynamic environments. These lenses stand out for their ability to produce vivid colors and minimize distortion, ensuring sharp, true-to-life images. Suitable image sensors contain a high pixel count, which enables precise capture of fine textures and intricate elements, enhancing the overall visual experience. Their advanced optical designs reduce aberrations and enhance contrast, providing consistent edge-to-edge performance across various lighting conditions.

Applications

Sunex Large Format lenses have a profound impact on total system performance. Their high resolution delivers lifelike imaging, making them essential for cutting-edge sports coverage, dynamic live broadcasts, immersive content capture, cinematic filmmaking and photography, geospatial mapping, teleconferencing, security, and Robotics applications where imaging quality is paramount. These lenses set a new benchmark for high-end professional imaging by delivering unparalleled clarity and detail.

High Dynamic Range (HDR)

HDR (high dynamic range) sensors can capture light intensity variations up to six or more orders of magnitude within the same image frame (~120db). This puts a very demanding requirement on lens performance.

Sunex has developed design expertise, process know-how, and nested cleanroom manufacturing facilities to eliminate or minimize optical noise (such as ghosts, flare, starbursts, and spurious images) in lenses for high-performance applications.

PN	Format	MP	HFOV	F/#	TTL	Feature
tbc	Full Frame	200MP	180°	2.8	105	All-Glass, wide-angle FOV
DSL005	Full Frame	200MP	200°	4.0	80	All-glass, wide-angle FOV, high RI
DSL592	1.2”	25MP	130°	2.9	44	All-glass, wide-angle FOV, Compact
DSL428	1”	20MP	80°	1.8	81	All-glass, High RI, Low F/#
DSL427	1”	20MP	42°	1.8	85	All-glass, Narrow FOV, Low F/#
DSL415	1”	20MP	190°	2.4	50	All- glass, Super Fisheye™, 0% F-Theta.

Table only shows a selection. Additional Large Format lens options are available.

Sensor Module Capabilities

Depending on the need and expertise of our customers, we provide design and manufacturing services for a complete sensor module. We strive to find the best solution for your needs, from designing the schematic, creating the PCB layout, and sourcing all components to building according to your PCB design and parts consignment.

At Sunex, we have the in-house expertise and capabilities for lens and sensor board design, manufacturing, and testing to deliver a fully tested sensor module.

Active Alignment Capabilities

We recommend that our customers consider an active alignment process to achieve the highest system performance when pairing a high-quality lens with a high-resolution sensor. Applying a fully automated 6-axis active alignment approach in mass production shortens cycle times, improves the system performance, and lower part-to-part variance.

Out of this league, image quality with up to 100MP lenses.

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Consulting – Design – Manufacturing - Support

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