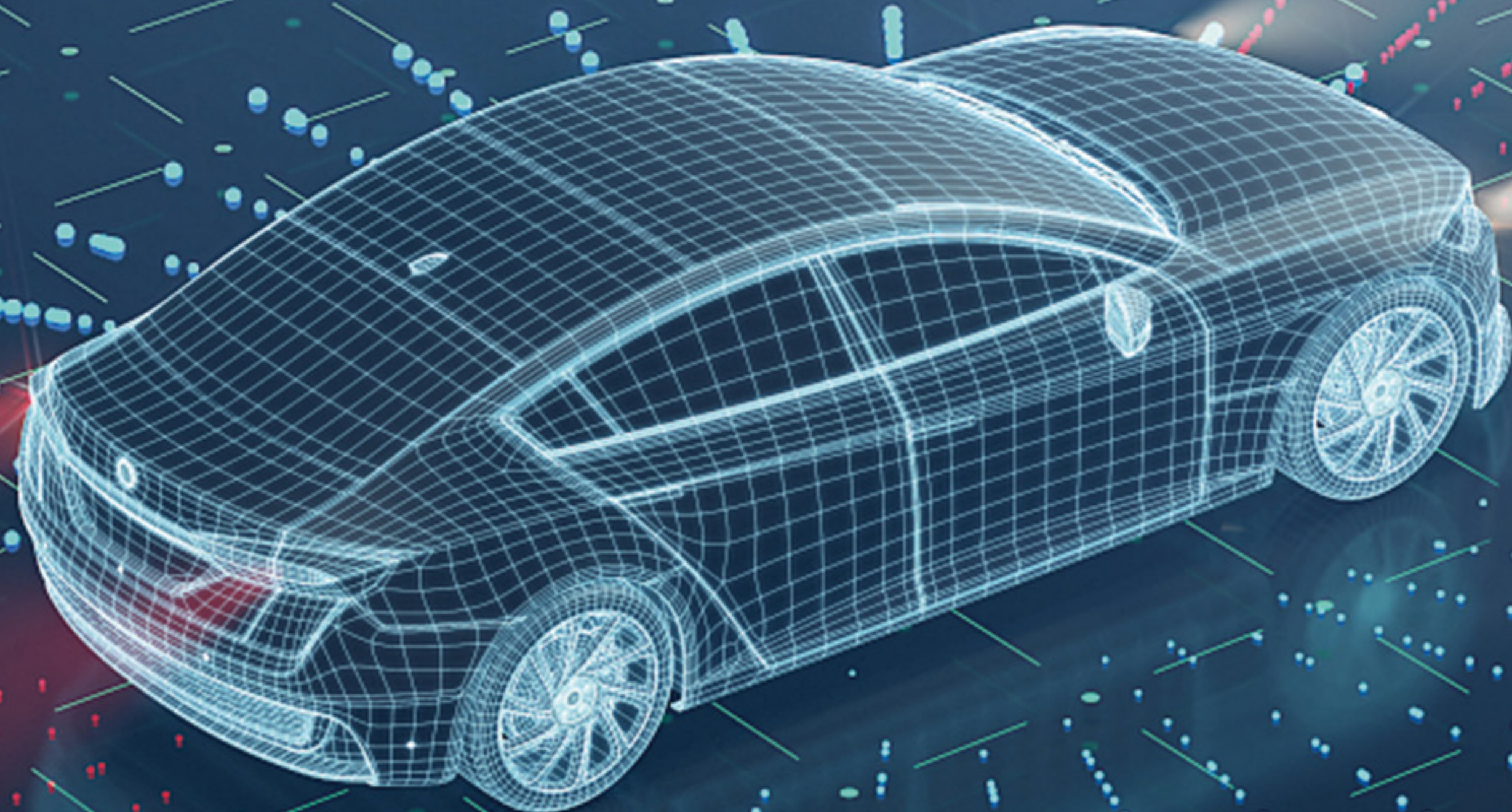


# AUTOMOTIVE PHOTONICS APPLICATION SOLUTIONS



**LiDAR**



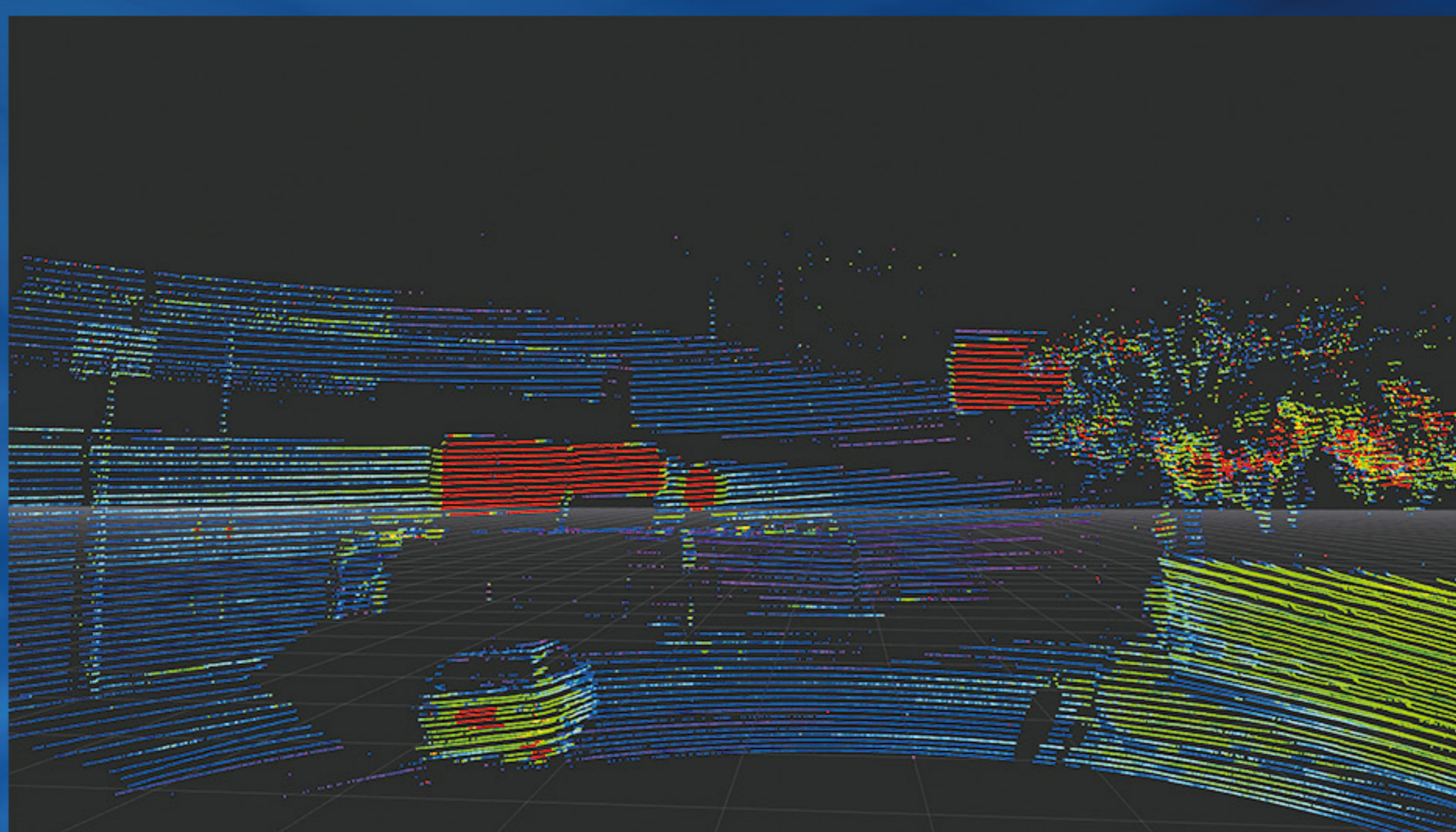
**AR HUD**

**DMS**

**Smart Lighting**



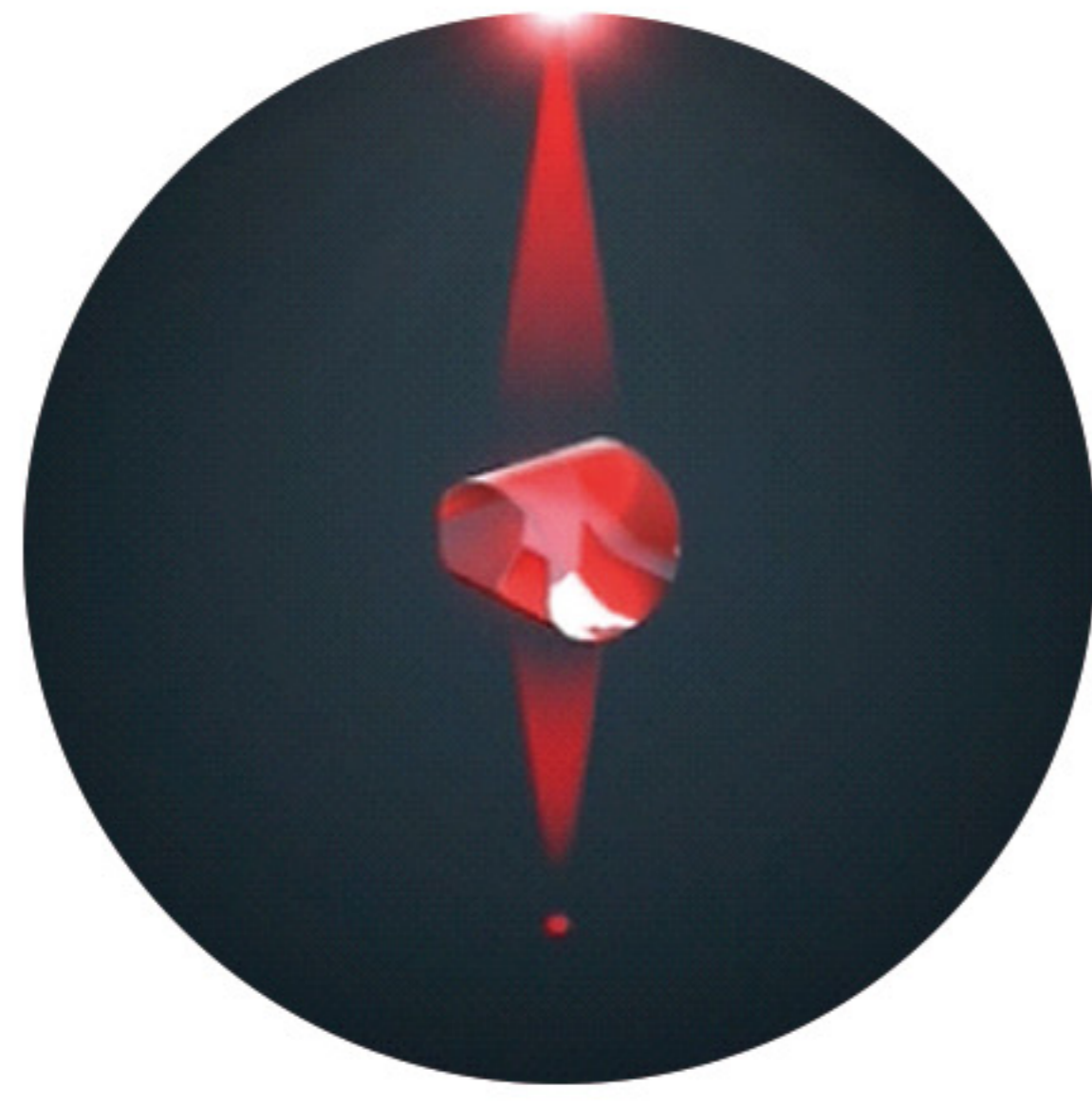
**LiDAR with Focuslight's  
BeamRazor™ 905 nm Line  
Laser Transmitter**



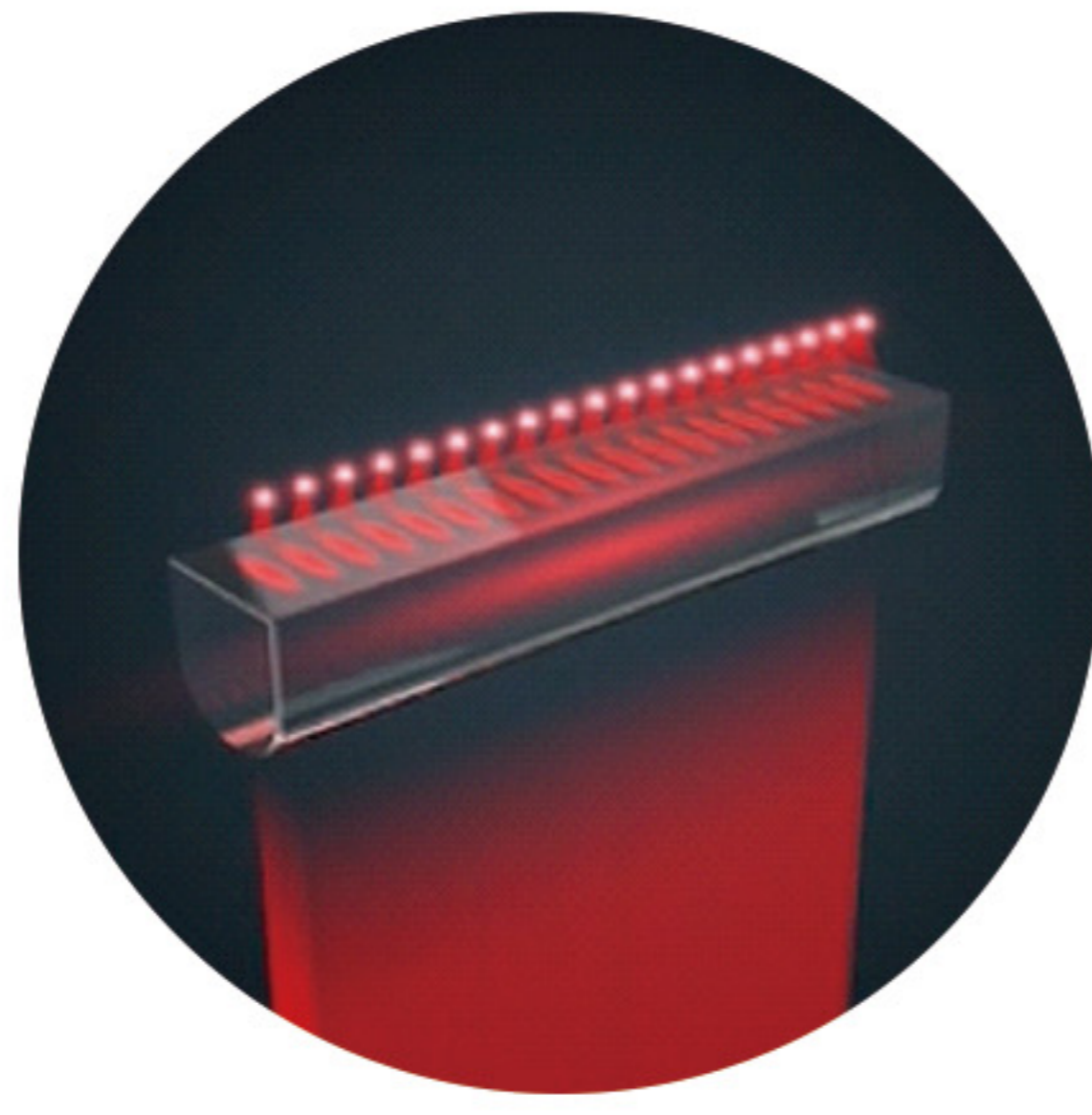
**LiDAR Point Cloud Map\***

*\*Courtesy of Tanway Technology*

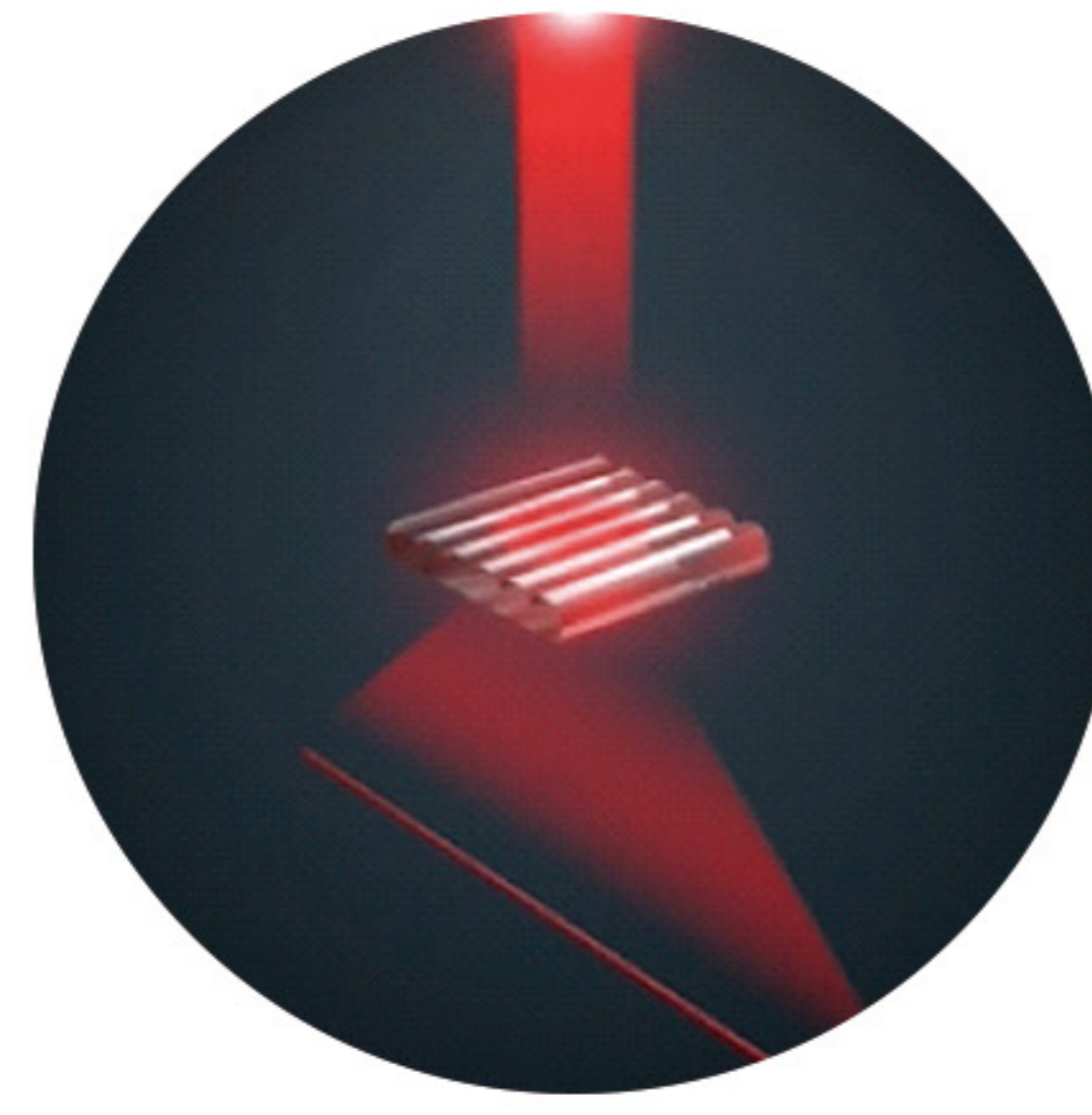
## Beam Shaping



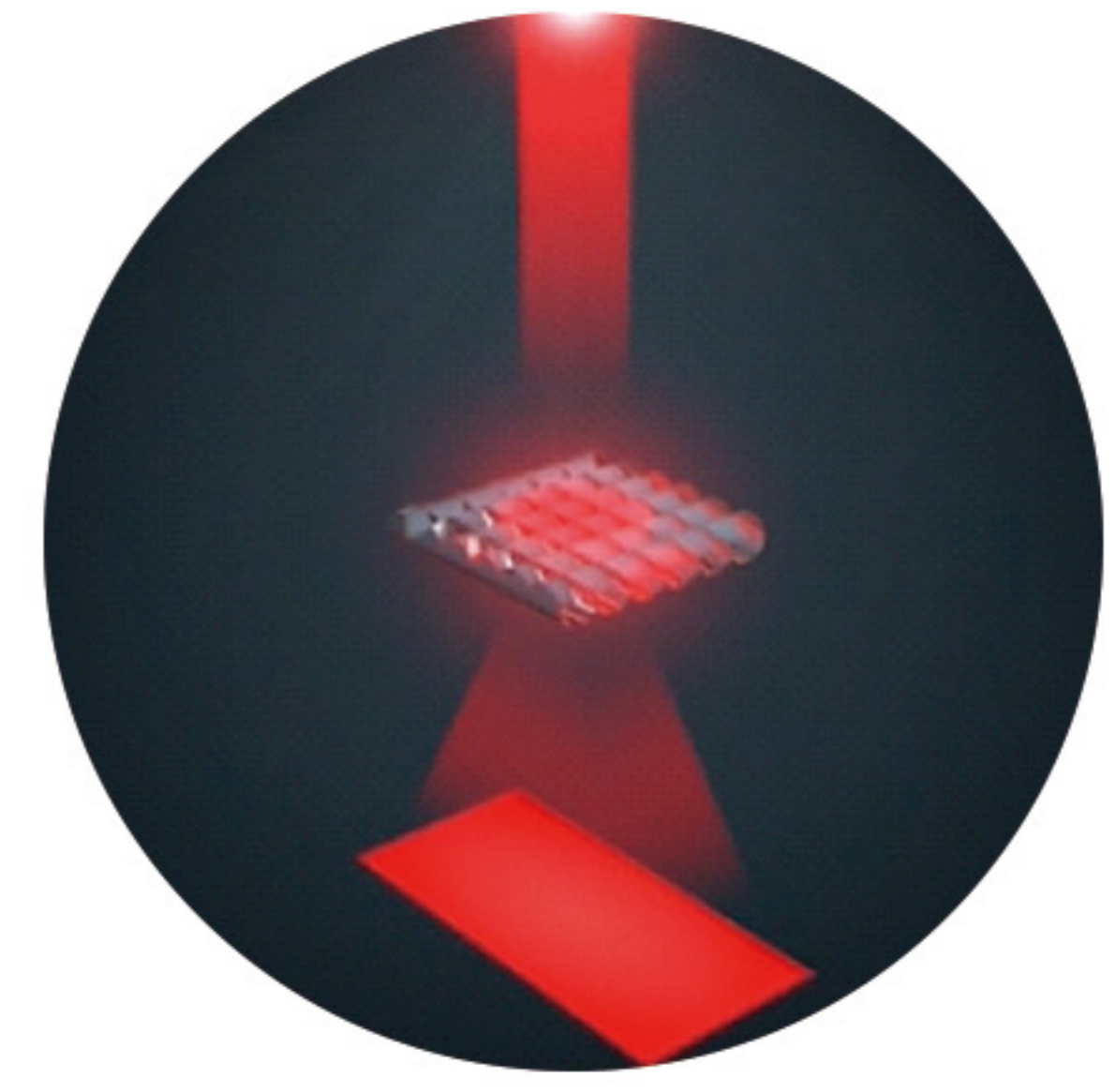
Focusing and Coupling



Collimation of Single Emitters and Bars

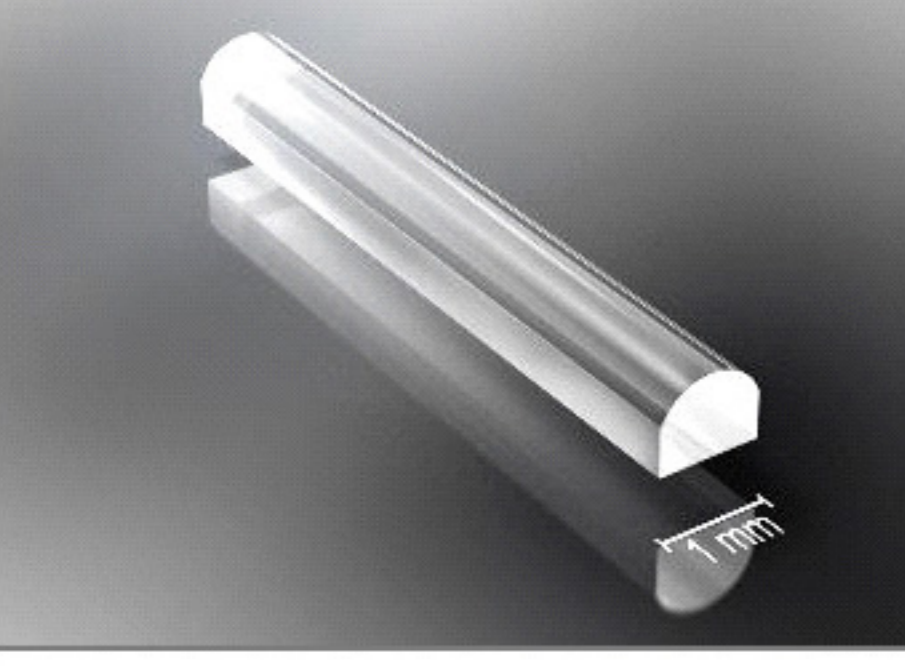
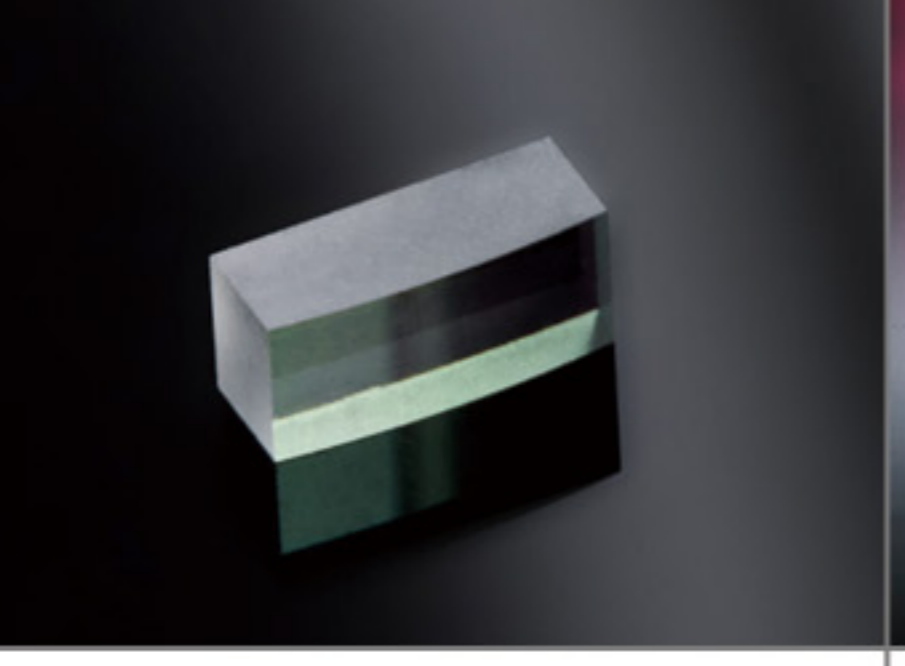
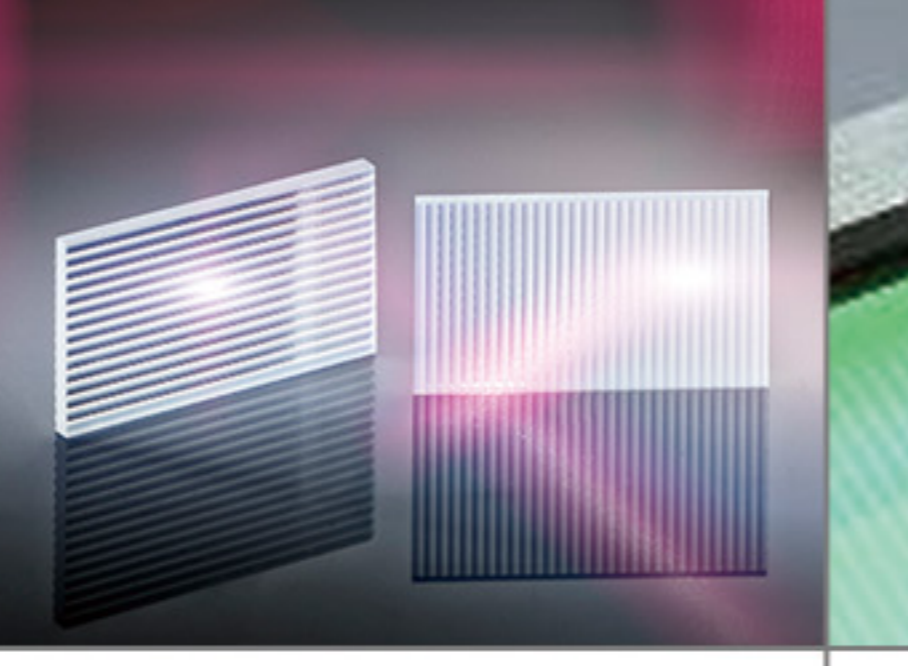
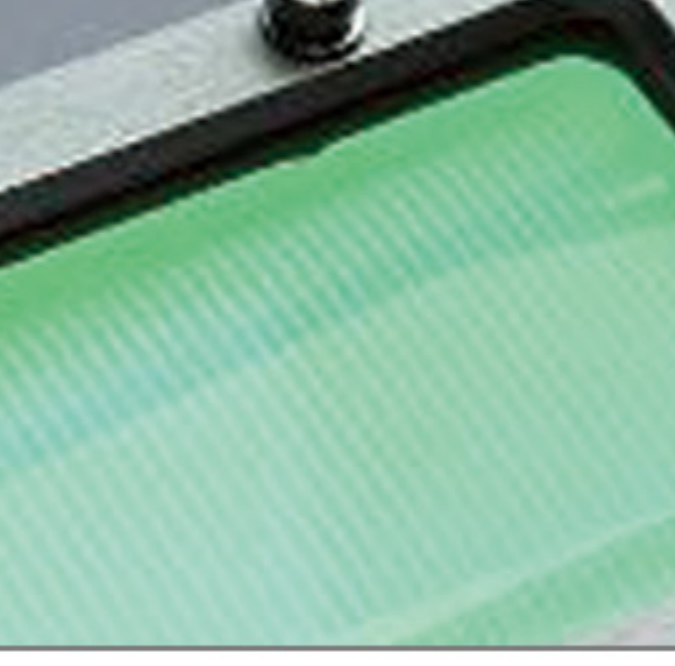


Line Beam Shaping with Angles > 100°



Homogeneous Rectangular Illumination

## Optical Assemblies for LiDAR Transmitters

FAC	SAC	Diffuser	Optical Assembly
			
<ul style="list-style-type: none"> <li>• Applicable for nanostacks</li> <li>• Long EFL design: 1.5 mm, 3.0 mm, 7.7 mm</li> <li>• Collimated angle &lt; 0.1°, remaining divergence: 92% power output within the given angle approved</li> </ul>	<ul style="list-style-type: none"> <li>• High index, thinner &amp; lighter upon premium collimation performance</li> <li>• Excellent optical coating durability for wide bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>• Achievable FOV: 160° x 120°, 60° x 45°, etc.</li> <li>• Pure glass-made, high reliability, qualified for automotive applications</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive-grade optical assembly for LiDAR applications</li> <li>• Fully customizable</li> </ul>

## Line Beam Transmitter

LE02 Pro	LX02
	
<ul style="list-style-type: none"> <li>• &gt; 700 W peak power, 905 nm wavelength</li> <li>• Line beam collimation, divergence angle &lt; 0.15°</li> <li>• FOV @slow axis (vertical) 25° or 11°, or customizable</li> </ul>	<ul style="list-style-type: none"> <li>• VCSEL based, line beam uniformity &gt; 80%</li> <li>• Peak power &gt;1000W @ &lt;5ns short laser pulses</li> <li>• Line horizontal divergence &lt;0.15°</li> </ul>

## Flash LiDAR Transmitter

AL01	AX02 Pro	AT02 / AT02 Pro
		
<ul style="list-style-type: none"> <li>• FOV 125° x 25° or 60° x 45°</li> <li>• 1.5 mJ energy @1064 nm in &lt; 10 ns, 30 Hz</li> <li>• Automotive-grade module</li> </ul>	<ul style="list-style-type: none"> <li>• FOV 125° x 25° or 60° x 45°</li> <li>• Peak power &gt; 700 W, short pulse &lt; 5ns</li> </ul>	<ul style="list-style-type: none"> <li>• DMS VCSEL illuminator, wide field of view up to 160°</li> <li>• Optional FOV 160° x 120° or 60° x 45°, etc.</li> <li>• Standard package 3235</li> </ul>

## COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing public company (SSE Star Market: 688167) that develops and manufactures high power diode lasers (photon generation), laser optics (photon control), and photonics modules and systems (application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. In 2017, Focuslight successfully acquired LIMO GmbH, and completed the brand unification in January 2022. In January 2024, Focuslight acquired SUSS MicroOptics (now as Focuslight Switzerland). Focuslight owns over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001, and IATF 16949 certified. Additional information can be found at [www.focuslight.com](http://www.focuslight.com).