

## Laser ZX20 450nm 60mW, 60°



Stock **#19-428** **2 In Stock**

⊖ 1 ⊕ €1.346<sup>00</sup>

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Volume Pricing	
Qty 1-9	€1.346,00 each
Qty 10+	€1.213,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads



### General

3R **Laser Class - IEC:**

Power Supply: [#24-361](#)  
M12 Cable: [#64-836](#) **Note:**

Homogeneous Line **Style:**

Z-Laser **Manufacturer:**

Diode	<b>Type of Laser:</b>
IIIa	<b>Laser Class - CDRH:</b>
<b>Physical &amp; Mechanical Properties</b>	
90	<b>Weight (g):</b>
97	<b>Housing Length (mm):</b>
20	<b>Housing Diameter (mm):</b>
<0.8	<b>Bore Sighting (mrad):</b>
<10	<b>Pointing Stability (<math>\mu\text{rad}/^\circ\text{C}</math>):</b>
<b>Optical Properties</b>	
450.00	<b>Wavelength (nm):</b>
Blue	<b>Color:</b>
60.00	<b>Fan Angle (<math>^\circ</math>):</b>
100mm to Collimation	<b>Focus Range (mm):</b>
<b>Electrical</b>	
60	<b>Output Power (mW):</b>
$\pm 3$	<b>Power Stability (%):</b>
400	<b>Modulation Frequency (kHz):</b>
<b>Hardware &amp; Interface Connectivity</b>	
Free Space	<b>Output Type:</b>
5 pins, M12	<b>Connector:</b>
9 - 30 DC	<b>Input Voltage (V):</b>
<b>Environmental &amp; Durability Factors</b>	
-10 to +50	<b>Operating Temperature (<math>^\circ\text{C}</math>):</b>
-40 to +85	<b>Storage Temperature (<math>^\circ\text{C}</math>):</b>
<b>Regulatory Compliance</b>	
<a href="#">View</a>	<b>Certificate of Conformance:</b>

## Product Details

- Homogenous Intensity Distribution Lines with Fan Angles from  $20^\circ$  to  $90^\circ$
- IP67 Rated Stainless Steel Housing
- Violet, Blue, Green, and Red Wavelengths Available

Z-Laser ZX20 Focusable Machine Vision Laser Diode Modules feature even-intensity distribution lines in wavelengths from 405 – 660nm for demanding image processing applications. The IP67 rated, stainless steel housings are shock and vibration proof, enabling these laser diode modules to be used in harsh industrial environments. Manually focusable without any additional tools, Z-Laser ZX20 Focusable Machine Vision Laser Diode Modules are ideal for use in measurement and alignment in machine vision, 3D measurement, positioning, and triangulation applications. Additional features include 400kHz TTL modulation for camera synchronization, analog modulation for output power adjustment, and a serial interface for monitoring temperature, laser usage, and failure codes.

**Note:** M12 connection cable [#64-836](#) is recommended for ease of system integration.

Red wavelengths (640 and 660nm) are most commonly used in machine vision applications, as the quantum efficiency of most camera sensors are optimized for this wavelength range. Violet (405nm), blue (450nm), and green (520nm) are most commonly used with semi-transparent surfaces or with highly reflective surfaces such as polished metal and solder joints. These wavelengths can also be used to create visual contrast on glowing materials such as molten steel.