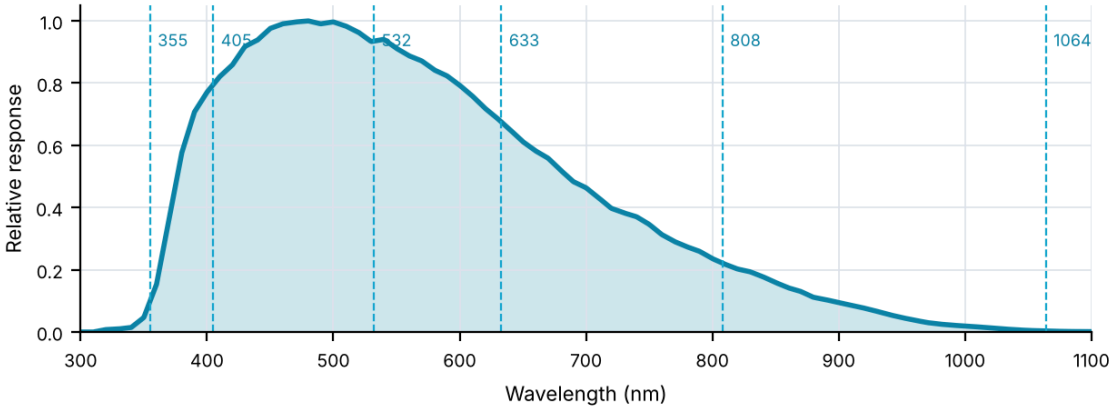
# UV-VIS-NIR Laser Beam Profiler – Wide-Area Ultra-High Resolution, 65 MP

Complete beam profiling system for large CW and pulsed beams, 350 – 1050 nm: camera head, software, calibration and acceptance test

| | |
|---|---|
| **Spectral range** | 350 – 1050 nm (silicon CMOS, peak QE ≈ 63 % at 480 nm) |
| **Resolution** | 9344 × 7000 px (65 MP) |
| **Pixel size** | 3.2 µm |
| **Active area** | 29.9 × 22.4 mm (37.4 mm diagonal) |
| **Frame rate** | 14.1 fps (12 bit, full frame) |
| **ADC / pixel format** | 12 bit, Mono8 – Mono16 |
| **Shutter** | Global shutter |
| **Sensor window** | No cover glass on the mono sensor – no window fringes with coherent beams |
| **Exposure** | 24.8 µs to 10 s |
| **Interface** | 10GBASE-T GigE Vision (also 5G / 2.5G / 1G), M12 connector, PoE+ (10GBASE-T cable ≤ 25 m) |
| **Trigger / I/O** | 8-pin M8 GPIO: opto-isolated input and output plus non-isolated bi-directional lines; hardware/software trigger |
| **Lens mount** | TFL-II mount; used without lens for direct beam profiling, attenuation per application |
| **Power** | PoE+ (IEEE 802.3at) or 12 – 24 VDC, < 12 W |
| **Dimensions** | 55 × 55 × 95.5 mm housing; 99.2 mm overall incl. mount ring and connectors |
| **Mass** | ≈ 304 g (camera head) |
| **Environment** | Operating −20 to 50 °C ambient, 20 – 80 % RH non-condensing |
| **Cooling** | None (passive) |
| **Software** | IZAK LBP APP: beam width/diameter, centroid, ellipticity and azimuth; peak position/value with saturation indication; fixed ROI or Auto-ROI; automated Pass/Fail test mode with exportable results; image save and measurement export. Optional API/DLL integration and AI Insights & Reporting add-on |
| **Included** | Camera head, Ethernet cable, PoE injector or power supply, tripod adapter plate, IZAK LBP APP license (USB key), calibration and acceptance test report |

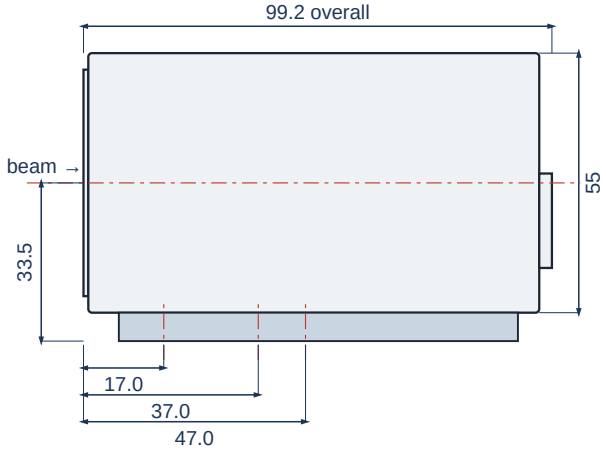
Typical values; specifications may change without notice. The quotation states the binding configuration.

## Typical relative spectral response

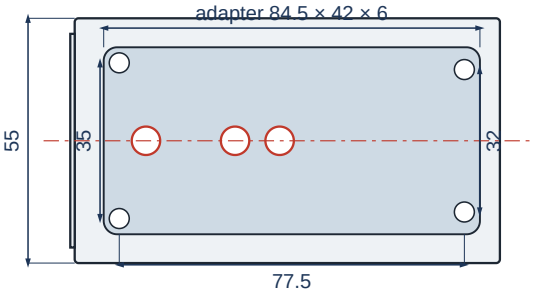



Typical sensor response (normalised, camera without lens or filter); dashed lines mark common laser wavelengths.

## Outline and mounting drawing – dimensions in mm




**SIDE VIEW – mounted on tripod adapter**

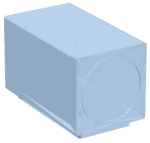



**BOTTOM VIEW – adapter footprint**

Tripod adapter plate (included)
1/4"-20 UNC tripod thread
Adapter-to-camera screw holes Ø4.5 (4 × M4 (included))

Optical axis 33.5 mm above the adapter base. Tripod threads (1/4"-20 UNC) 17.0 mm, 37.0 mm, 47.0 mm behind the TFL-II mount reference face. Adapter 84.5 × 42 × 6 mm, aluminium, fixed with 4 × M4 (included). Dimensions after the camera manufacturer's drawings; verify against the STEP model before machining fixtures.

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|---|---|---|---|
| **Title** UV-VIS-NIR Laser Beam Profiler – Wide-Area Ultra-High Resolution, 65 MP – outline with tripod adapter | **SKU** 31008 | **Drawing** IZAK-DWG-31008-01 | **Rev** 1.0 |
| **Drawn** IZAK Scientific, 2026-11-10 | **Scale** not to scale | **Mount** 1/4"-20 UNC via tripod adapter plate (included) | **3D** 31008_3D.step |



3D envelope model (STEP AP214): 31008_3D.step – housing, mount ring, connector envelope and tripod adapter plate with hole pattern, for mechanical integration. Internal components are not modelled. Keep ≥ 50 mm free behind the connectors for cable bend radius.