



LaserCam-HR-InGaAs

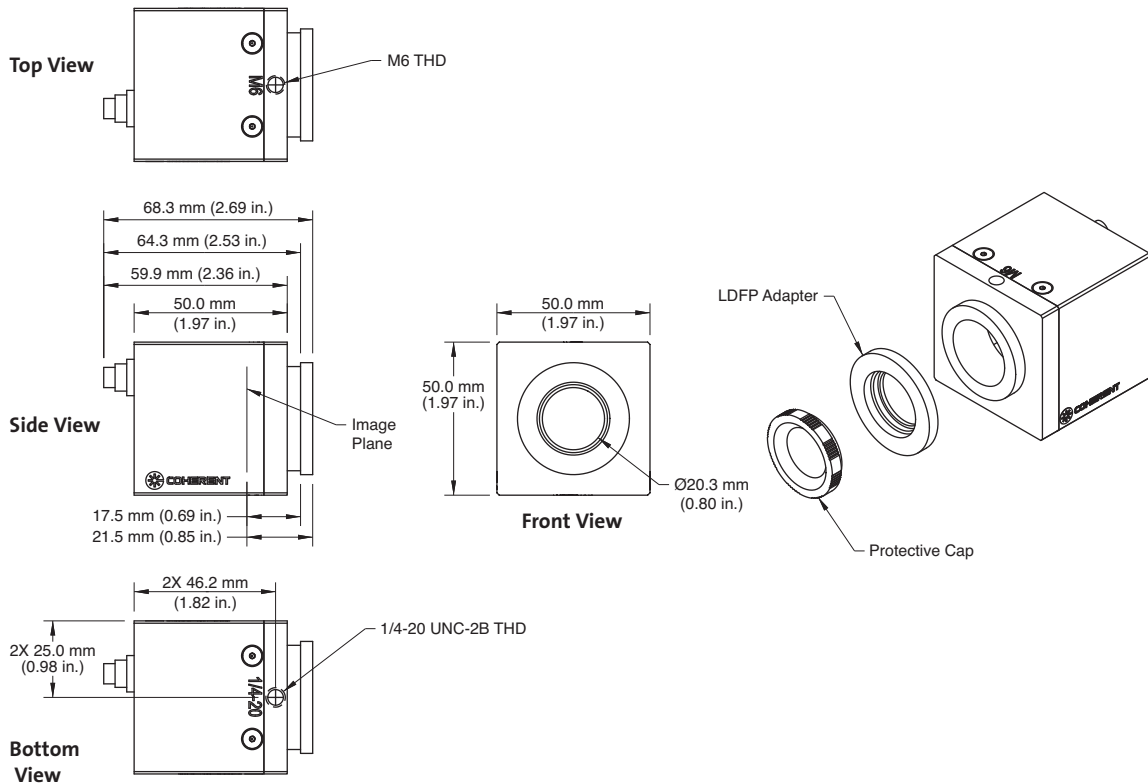
High-Resolution SWIR Laser Beam Profiling System



Features

- Large area, 320 x 256 matrix, uncooled InGaAs array
- >1000:1 signal to noise – 14-bit digital output
- 30 μm x 30 μm pixel size
- Compact 50 x 50 x 68 mm package – fits into small spaces
- USB 2.0 interface with single USB cable operation – no power supply required
- 900 nm to 1700 nm spectral range
- Variable exposure time
- Coherent Adaptive Pixel Technology (CAPT) pixel by pixel offset, linearity and blemish correction
- CW and Pulsed operation including external triggering
- Adjustable trigger delay

Mechanical Specifications



Superior Reliability & Performance

LaserCam™-HR-InGaAs

High-Resolution SWIR Laser Beam Profiling System

Device Specifications

Sensor Elements (pixels)	320 x 256
Pixel Size (µm)	30 x 30
Sensor Active Area (mm)(H x V)	9.6 x 7.7
Spectral Range (nm)	900 to 1700 (400 to 1100 with LDFP)
Beam Diameters (mm)	0.5 to 6.0
Glassless Sensor	Low Distortion Faceplate is removable
Low Distortion Faceplate (LDFP)	NG10 glass, nominal OD = 2.3
Electrical Interface	USB 2.0
Capture Modes	Continuous (CW), pulsed
Variable Exposure Time	20 µsec to 10 msec, default at 1 msec
Pulsed Mode Trigger Methods	Trigger In (TTL)
Maximum Frame Rate (FPS)	25 (live video, no calculations), 15 (capture with calculations)
Saturation	
CW (at 1064 nm)	3.5 mW/cm ² (with LDFP), 50 µW/cm ² (without LDFP)
CW (at 1523 nm)	350 µW/cm ² (with LDFP), 30 µW/cm ² (without LDFP)
Pulse (at 1064 nm)	5 µJ/cm ² (with LDFP), 0.08 µJ/cm ² (without LDFP)
USB 2.0 Cable	6 ft. standard A/B cable included
Trigger Connector	BNC receptacle (trigger cable included)

BeamView-USB Analyzer PC Software

Measures	Centroid & peak locations, pointing stability beam width/diameter, divergence, gaussian fit analysis, elliptical analysis and uniformity analysis
Beam Width Calculations	Multiple, including the ISO standard d4 Sigma
Flat Top Beam Analysis	Beam Uniformity, Plateau Uniformity, Flatness Factor, Edge Sharpness, Effective Irradiation Area, Effective Average Power Density
Displays	2-D, 3-D and choice of 4 color scales
Data Logging	For long-term laser stability analysis
Report Generation	PDF
Data File Formats	ATS, PNG, Binary, ASCII, Bitmap, JPEG and many more
Operating System Compatibility	Windows XP (SP2), Vista 32-bit (SP1)
Pass/Fail Analysis	Of all measurements for production automation
Statistical Analysis	Of all measured laser parameters
Background Noise Level Monitoring	Alerts user when background correction is invalid
Password Protection	Limits unauthorized access to system configuration
Automated Apertures	Display calculated beam dimensions
User-Defined Apertures	Limit the scope of data for "Power-in-the-Bucket" calculations
Cursors	Display centroid, comparative and fit data
Crosshair	Defines bore-sighting central axis, centroid and/or peak locations
Total Power or Energy	
Calibrated with an External Meter	Enables power density or fluence measurements
Features	On-line help, hot function keys, graphical pan, zoom and many more
Part Number (RoHS)	1149002

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's LabMax meters are compliant with the EU Restriction of Hazardous Substances (RoHS) and Waste Electrical and Electronic Equipment (WEEE) Directives. They also meet the intent of Directive 89/336/EEC for Electromagnetic Compatibility (CE). CE compliance was demonstrated per testing to EN61326 Electromagnetic Compatibility Product Family Standard for Measurement, Control and Laboratory Equipment.

Coherent offers a Limited Warranty for all LaserCam-HR systems. For full details of this warranty coverage, please refer to the "Warranty Information for Instruments" webpage under the Service section of our website at www.Coherent.com or contact your local Sales or Service representative.



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