SCANNING SLIT

	Beam'R2	BeamMap2
Key Features	Integrated X and Y profiles	Real-time XYZΘΦ measurement and focus finding Real-time pointing, divergence, and M^2 measurements
Interface	USB 2.0 Port-powered	
CW or Pulsed?	CW, Pulsed Minimum PRR (Si detector) ≈ [500/(Beam diameter in µm)] kHz	
Wavelengths	Si: 190 - 1150 nm InGaAs: 650 - 1800 nm Si + InGaAs: 190 - 1800 nm Si + InGaAs, extended: 190 - 2500 nm	
X-Y-Z Profiles, plus Θ-Φ	N/A	Yes, unique patented capability
Best Resolution	0.1 µm	
Smallest Beam	2 µm (Knife Edge mode)	
Largest Beam	See limits below this table	
Update Rate	5 Hz real-time (adjustable 2-10 Hz)	
M^2 Measurement	Yes - with M2DU-BR accessory	Yes - real-time
Locate Focus	Yes - with M2DU-BR accessory	Yes - real-time
Pointing/Divergence	Yes - with M2DU-BR accessory	Yes - real-time
Switched Gain (Opt. dB)	32 dB	

Maximum Beam Size. Dimensions in mm.

Si Detector

InGaAs

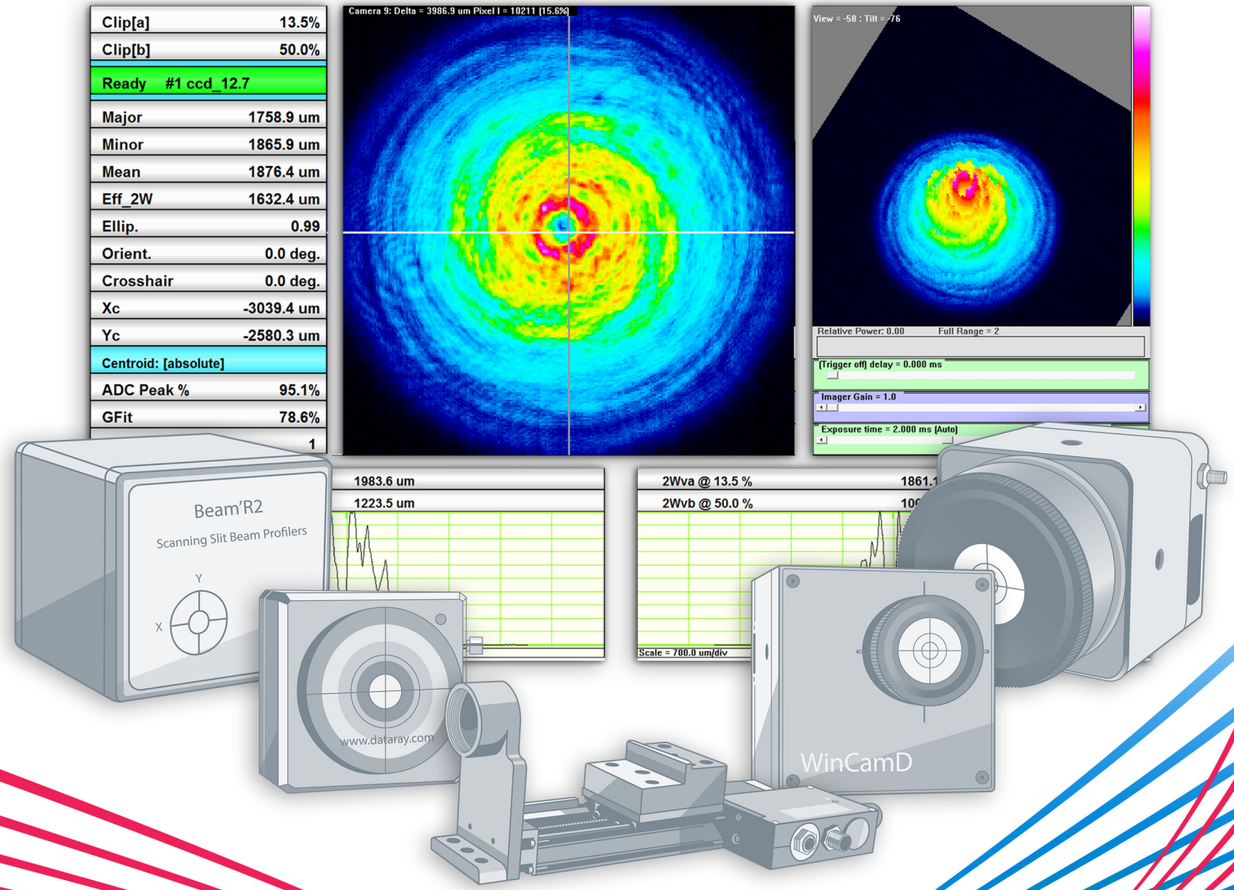
Extended InGaAs

+1 530 395 2500 | www.dataray.com | sales@dataray.com

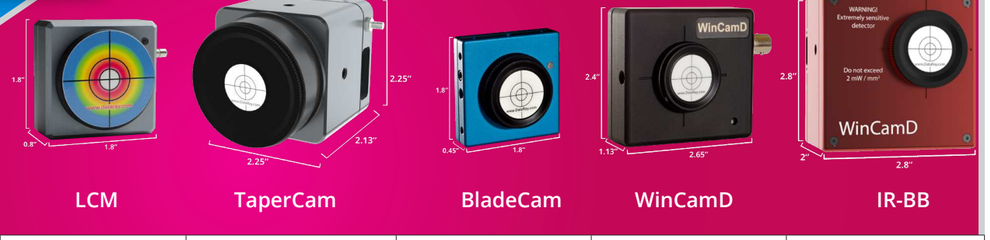
Selection Guide Rev.01172020

SIMTRUM

BEAM PROFILING SELECTION GUIDE



CAMERAS



LCM TaperCam BladeCam WinCamD IR-BB

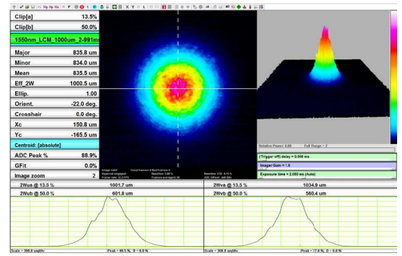
	WinCamD-LCM	TaperCamD-LCM	BladeCam-HR WinCamD-UHR	BladeCam-XHR WinCamD-XHR	WinCamD-IR-BB
Imaged areas shown actual size.					
Image area (mm)	11.3 x 11.3	25 x 25	6.6 x 5.3	6.5 x 4.9	10.88 x 8.16
Sensor	1" CMOS		1/2" CMOS		Vanadium oxide (VOx) microbolometer
Resolution	2048 x 2048		1280 x 1024	2048 x 1536	640 x 480
Pixel count	4.2 MPixel		1.3 MPixel	3.1 MPixel	307 KPixel
Pixel dimensions (µm)	5.5 x 5.5	12.5 x 12.5	5.2 x 5.2	3.2 x 3.2	17 x 17
Wavelength range	355 - 1150 nm standard, see next page for others				Broadband MWIR/ FIR: 2 - 16 µm
Interface	USB 3.0 Port-powered		USB 2.0 Port-powered		USB 3.0 Port-powered
CW or Pulsed ?	CW, Pulsed, Auto Trigger		CW/Quasi-CW		CW, Pulsed > 1 kHz
Shutter type	Global		Rolling		
Single pulse capture PRR	12.6 kHz		N/A		N/A
Min. beam (10 pixels) (µm)	~55	~125	~52	~32	~170
Max. frame rate (Hz)	60+		20+		30 (7.5 for export)
Signal to RMS Noise	2,500:1		1,000:1		≥1000:1
Electronic Shutter Dynamic Range (dB)	44				N/A
ADC	12-bit		10-bit		14-bit
Form factor	LCM	TaperCam	BladeCam or WinCamD		IR-BB

Ultraviolet and Telecom/NIR

Ultraviolet

- UV converters
  - Compatible with all standard cameras
  - Image Areas to 47 mm
  - Converts wavelengths as short as x-ray to visible
- UV sensor/filter option
  - Versatile beam profiling for 190-1150 nm

UV Converter



Telecom/NIR

- Phosphor coating (converts IR to visible)
  - Economical beam profiling for 1480-1610 nm
- Longpass filter option
  - High resolution beam profiling for 1150-1350 nm
- **COMING SOON: beam profiling camera for 1550 nm!**

Attenuation Options

Polarization Preserving Beam Sampler (PPBS)

- Dual wedged beam sampler
- UV-FS, ZnSe, CaF_2, BaF_2 options for broad spectral coverage
- High power handling with optional Beam Trap (BT-50) for beams up to 50 W

PPBS

Compact Beam Sampler (CBS)

- High reflectance mirror with high power handling
- Short optical path length (< 30 mm)
- Great for focused beams

CBS

Custom Systems

Large Beam Profiling Systems (LBPS)

- Objective planes up to 300 mm
- Reflective system with speckle reduction
- Transmissive system for non-coherent sources

LBPS-TS

LensPlate2

- Custom lens pairs designed for:
  - Magnifying very small focal spots
  - Re-imaging inaccessible beam waists
- Factory calibrated

LensPlate2

Translation Stages

- 50 and 200 mm translation stages
- Fully automated in DataRay software
- ISO11146 compliant M^2 and divergence measurements
- Direct measurement of line lasers up to 200 mm in length with LLPS

M2DU-50-WCD

LLPS-200-LCM