

### 3.1.3 User Guide for Choosing the Optimum Beam Profiling System

Laser Wavelength	Power			Minimum Beam Size				
	<100mW	100mW-100W	>100W	<20µm	>20 <50µm	>50µm	>500µm	>1mm
UV-Vis	NS-Si	NS-Pyro		NS-Si/3.5/1.8	NS-Si/9/5	NS-Si/9/5	NS-Si /9/5	NS-Si /9/5
	SP932U/SP204S	SP932U/SP204S	NS-Pyro		NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5
			SP932U/SP204S			SP932U/SP204S	SP932U/SP204S	SP932U/SP204S
	SP402S	SP402S						
NIR 1000-1100nm	NS-Ge	NS-Pyro	SP402S			SP402S	SP402S	SP402s
	SP932U/SP204S	SP932U/SP204S	BW	NS-Ge/3.5/1.8	NS-Ge/9/5	NS-Ge/9/5	NS-Ge/9/5	NS-Ge/9/5
			NS-Pyro		NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5
	SP402S	SP402S	SP932U/SP204S			SP932U/SP204S	SP932U/SP204S	
Industrial & Additive								
Fiber			BW			BW	BW	
CO2	Pyrocam	Pyrocam						Pyrocam
Telecom and Eye-Safe 1100-1800nm	NS-Ge	NS-Pyro		NS-Ge/3.5/1.8	NS-Ge/9/5	NS-Ge/9/5	NS-Ge/9/5	NS-Ge/9/5
			NS-Pyro		NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5
						SP1203/SP1201	SP1203/SP1201	SP1203/SP1201
						SP301Q	SP301Q	
	Pyrocam	Pyrocam	Pyrocam				Pyrocam	Pyrocam
1500-1600nm	NS-Ge	NS-Ge	NS-Ge	NS-Ge/3.5/1.8	NS-Ge/9/5	NS-Ge/9/5	Pyrocam	NS-Ge/9/5
							SP1203	SP203P
							SP1201	SP1203
	SP203P	SP203P	SP203P					SP1201
	SP403P	SP403P					SP203P	
						SP403P	SP403P	
MIR & FIR	Pyrocam	NS-Pyro		Pyrocam w/ Beam Expansion	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5
		Pyrocam	NS-Pyro				Pyrocam	Pyrocam
			Pyrocam					

**Abbreviations:**  
**FIR** Far Infrared  
**Ge** Germanium  
**HP** High Power  
**MIR** Mid-Infrared  
**UV-Vis** Ultraviolet - Visible  
**NIR** Near Infrared  
**Si** Silicon  
**SP** Indicates camera profiler  
**NS** NanoScan  
**BW** BeamWatch

Laser Wavelength	Minimum Beam Size		CW or Pulsed			Customer Priority				
	>5mm	>10mm	CW	Pulsed <1kHz	Pulsed >1kHz	Cost	2D/3D	No optics	Speed	Ease of use
UV-Vis	Pyrocam	NS-Pyro		Pyrocam w/ Beam Expansion	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS-Pyro/9/5	NS	NS
		Pyrocam	NS-Pyro				Pyrocam	Pyrocam		
			Pyrocam							
NIR 1000-1100nm			NS	SP932U/SP204S	SP932U/SP204S	SP932U/SP204S	SP932U/SP204S	NS	NS	NS
	BW		SP932U/SP204S					BW		
	SP402S	SP504S		SP402S	NS		SP402S			
	SP402S	SP402S	SP402S		SP402S					
			BW							
Industrial & Additive										
Fiber	Pyrocam	Pyrocam	Pyrocam	Pyrocam	Pyrocam	NS/Pyrocam	Pyrocam	NS/Pyrocam	Pyrocam	Pyrocam
CO2								NS/Pyrocam		
Telecom and Eye-Safe 1100-1800nm				SP1203/SP1201	SP1203/SP1201		SP1203/SP1201			
				SP301Q	SP301Q		SP301Q			
			NS			NS		NS	NS	NS
	Pyrocam				NS		Pyrocam			
1500-1600nm					NS					
			SP1203/SP1201	SP1203/SP1201	SP1203/SP1201					
			SP301Q	SP301Q	SP301Q					
	SP203P	SP403P				SP203P	SP203P	NS	NS	NS
	SP403P		SP403P	SP403P		SP403P				
MIR & FIR			NS	Pyrocam	NS	NS	Pyrocam	NS	NS	NS
	Pyrocam		Pyrocam		Pyrocam					

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