

3.1.3 User Guide for Choosing the Optimum Beam Profiling System

| Laser Wavelength | Power | | | Minimum Beam Size | | | | | |
|----------------------------------|-------------|-------------|-------------|---------------------------|---------------------------|-------------|-------------|--------------|-------------|
| | <100mW | 100mW-100W | >100W | <10µm | <20µm | >20 <50µm | >50µm | >500µm | >1mm |
| UV-Vis | NS-Si | NS-Pyro | HP-NS | NS-Si/3.5/1.0 | NS-Si/3.5/1.8 | NS-Si/9/5 | NS-Si/9/5 | NS-Si/9/5 | NS-Si/9/5 |
| | SP620 | SP620 | NS-Pyro | | | NS-Pyro/9/5 | NS-Pyro/9/5 | NS-Pyro/9/5 | NS-Pyro/9/5 |
| | | | SP620 | | | | SP620 | SP620 | SP620 |
| | SP620 | NS-Pyro | HP-NS | NS-Ge/3.5/1.0 | NS-Ge/3.5/1.8 | NS-Ge/9/5 | NS-Ge/9/5 | NS-Ge/9/5 | NS-Ge/9/5 |
| NIR 1000-1100nm | NS-Ge | SP620 | NS-Pyro | | | NS-Pyro/9/5 | NS-Pyro/9/5 | NS-Pyro/9/5 | NS-Pyro/9/5 |
| | | | SP620 | | | | SP620 | SP620/ SP503 | |
| | | | | | | | | Pyrocam | |
| Telecom and Eye-Safe 1100-1800nm | NS-Ge | NS-Pyro | HP-NS | NS-Ge/3.5/1.0 | 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 |
| | | | | | | | XEVA | XEVA | XEVA |
| | | | | | | | | Pyrocam | Pyrocam |
| | NS-Ge | NS-Ge | NS-Ge | NS-Ge/3.5/1.0 | NS-Ge/3.5/1.8 | NS-Ge/9/5 | NS-Ge/9/5 | Pyrocam | NS-Ge/9/5 |
| 1500-1600nm | SP 620-1550 | SP 620-1550 | SP 620-1550 | | | | SP 620-1550 | XEVA | SP 620-1550 |
| MIR & FIR | Pyrocam | NS-Pyro | HP-NS | Pyrocam w/ Beam Expansion | 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 | | | | | | |
| | | | ModeCheck | | | | | | |

Abbreviations:

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

| Laser Wavelength | Minimum Beam Size | | CW or Pulsed | | | Customer Priority | | | | |
|----------------------------------|-------------------|---------------|--------------|--------------|--------------|-------------------|-------------|-----------|-------|-------------|
| | >5mm | >10mm | CW | Pulsed <1kHz | Pulsed >1kHz | Price | 2D/3D | No optics | Speed | Ease of use |
| UV-Vis | NS-Si /9/5 | NS-Si /25/25 | NS | SP620 | SP620 | SP620 | SP620 | NS | NS | NS |
| | NS-Pyro/20/25 | NS-Pyro/20/25 | SP620 | | NS | | | | | |
| | SP620 | L11058 | | | | | | | | |
| NIR 1000-1100nm | NS-Ge/12/25 | | NS | SP620 | SP620 | SP620 | SP620 | NS | NS | NS |
| | NS-Pyro/20/25 | NS-Pyro/20/25 | SP620 | | NS | | | | | |
| Telecom and Eye-Safe 1100-1800nm | NS-Ge/12/25 | | NS | XEVA | XEVA | NS | XEVA | NS | NS | NS |
| | NS-Pyro/20/25 | NS-Pyro/20/25 | | | NS | | Pyrocam | | | |
| | Pyrocam | | | | | | | | | |
| 1500-1600nm | NS-Ge/12/25 | NS-Pyro/20/25 | | | NS | | | | | |
| | SP 620-1550 | | XEVA | XEVA | XEVA | SP 620-1550 | SP 620-1550 | NS | NS | NS |
| MIR & FIR | NS-Pyro/20/25 | NS-Pyro/20/25 | NS | Pyrocam | NS | NS | Pyrocam | NS | NS | NS |
| | Pyrocam | | Pyrocam | | Pyrocam | | | | | |
| | | | | | | | | | | |

Abbreviations:

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