

# basiScan

## Compact Optical Parametric Oscillator



### Features and Benefits

- Simple and reliable design
- Adaptable to most commercial Nd:YAG pump lasers
- Easy tuning with micrometer screw
- Motor/PC control optional
- Minimum number of optical components
- Ideal for education and basic applications requiring variable wavelength

### basiScan Specifications

| basiScan / basiScan-M  | 120                     | 280                  | 120/HE                  | 280/HE               |
|------------------------|-------------------------|----------------------|-------------------------|----------------------|
| Pump Energy @ 355nm    | 120 mJ                  | 280 mJ               | 120 mJ                  | 280 mJ               |
| Pulse Energy Max (S)   | 26 mJ                   | 60 mJ                | 42 mJ                   | 95 mJ                |
| Pulse Energy Max (S+I) | 45 mJ                   | 105 mJ               | 59 mJ                   | 138 mJ               |
| Linewidth <sup>2</sup> | 10-450 cm <sup>-1</sup> |                      | 10-500 cm <sup>-1</sup> |                      |
| OPO Pulse Width        | 0-3 ns < pump           |                      |                         |                      |
| Repetition Rate        | 0-30 Hz                 | 0-10 Hz <sup>1</sup> | 0-30 Hz                 | 0-10 Hz <sup>1</sup> |
| Tuning Range           | 410-2500 nm             |                      |                         |                      |
| Beam Divergence        | 3-8 mrad                |                      | 4-10 mrad               |                      |
| Beam Diameter          | <5.5 mm                 | <8 mm                | <5.5 mm                 | <8 mm                |

(1) Up to 30 Hz allowed, if pump powers do not exceed 3.5 W

(2) Depends on pump pulse width and wavelength

### basiScan

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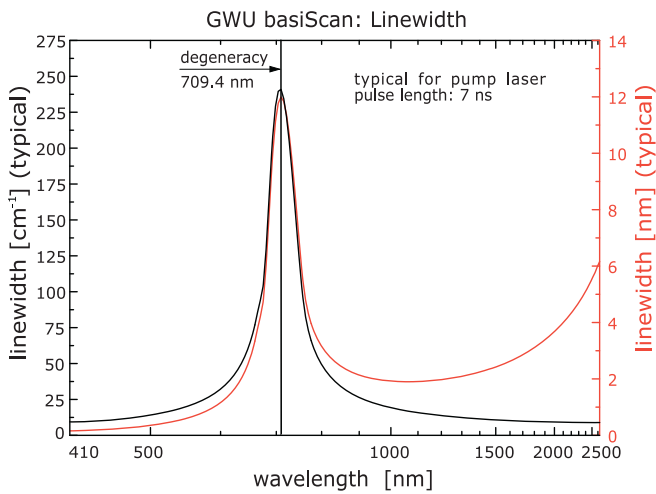
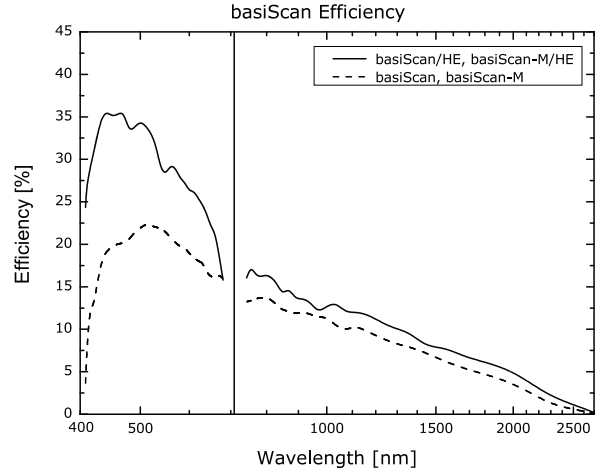
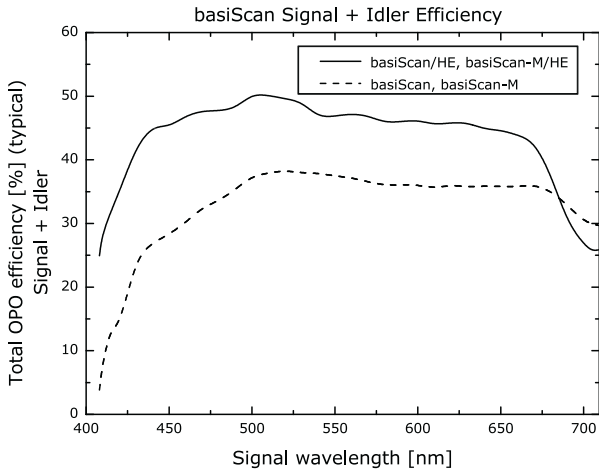
The basiScan OPO is designed to work with most pulsed Nd:YAG lasers operating at 3rd harmonic (355nm). basiScan has been distilled to the basic components. The result is a simple and rugged OPO with wavelength control by a micrometer screw or an optional motorizer. Ideal for education and applications standard.

The basic BBO-OPO!

#### Notes:

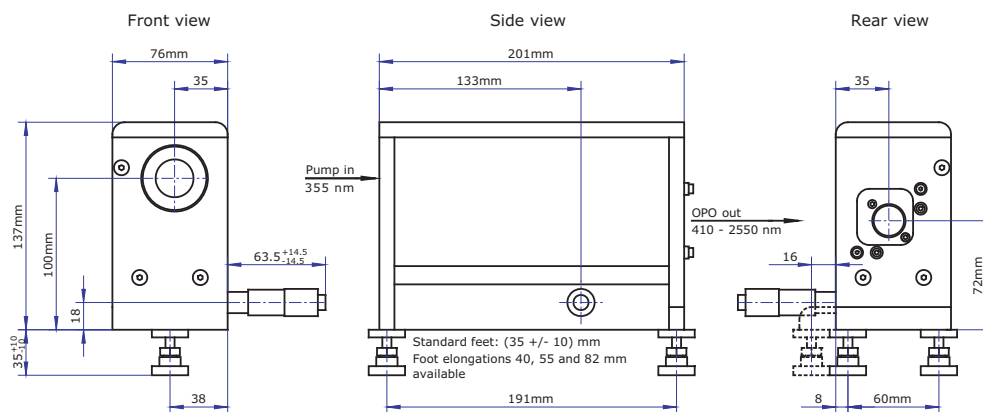
All specifications depend on pump laser specifications and performance. Please contact factory or your sales representative for details. All specifications subject to change without notice.

# basiScan Performance



| Pumplaser Requirements |                            |
|------------------------|----------------------------|
| Pump Wavelength        | 355 nm                     |
| Pump Energy            | 50 - 280 mJ/pulse          |
| Pulse Width            | 3.5 - 10 ns                |
| Repetition Rate        | 1 - 30 Hz                  |
| Spatial Beam Profile   | homogeneous                |
| Divergence             | < 0.5 mrad (or on request) |

# basiScan Dimensions and Properties



## Mechanical + Utilities

Size (OPO body only)  
 Length 201 mm  
 Width 76 mm  
 Height 137 mm

Weight 5 kg

For dimensions with feet, micrometer screw, and other protruding elements please refer to dimensional drawing; motor will exceed length of micrometer screw.

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