

Femtolite Ultra Family

Erbium-doped Femtosecond Fiber Lasers



Femtolite Ultra Laser Head

Product Features

- Compact and robust design for easy integration
- Proven reliability of Femtolite series since market introduction in 1995
- Meets stringent mechanical reliability requirements
- Complies with IEC 60068-2-27 and 60068-2-6 standards for shock and vibration
- Simple operation by controller panel or 5 V digital input

Product Models

| | AX-20 | BX-60 | CX-20* | | FX-10 |
|-------------------|--------------|--------------|---------------|--------------|--------------|
| Center Wavelength | 780 ± 5 nm | 1560 ± 5 nm | 780 ± 5 nm | 1560 ± 10 nm | 810 ± 5 nm |
| Average Power | ≥ 20 mW | ≥ 60 mW | ≥ 20 mW | ≥ 20 mW | ≥ 10 mW |
| Pulse Duration | ≤ 100 fs | ≤ 100 fs | ≤ 100 fs | ≤ 100 fs | ≤ 110 fs |
| Repetition Rate | 50 MHz | | | | |

*Simultaneous, synchronized pulses at both wavelengths

Femtolite **Ultra** Specifications

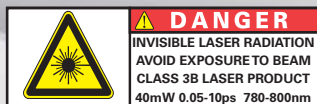
| | |
|------------------------|--|
| Polarization | Vertical with respect to baseplate |
| Power Stability | ≤ 1% rms after stabilization over ± 1 °C |
| Laser Head Dimensions | 142 x 96 x 38 mm ³ |
| Output Aperture Height | 23 mm |
| Laser Head Weight | 0.8 kg |
| Controller Dimensions | 215 x 200 x 89 mm ³ |
| Controller Weight | 2 kg |
| Operating Voltage | 100-240 VAC at 50-60 Hz |
| Power Consumption | < 50 W |

Other Parameters

- Operating Temperature: 15-35 °C
- Storage Temperature: 0-50 °C
- Warm-up Time: ≤ 30 minutes
- Cable Length: 2 m



Femtolite Ultra Complete System



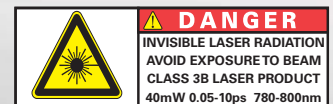
AX-20 Warning Label



BX-60 Warning Label



CX-20 Warning Label



FX-10 Warning Label

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Femtolute F/G/H Family

Erbium-doped Femtosecond Fiber Lasers



FX-100i (left) and HX-150 (right) Laser Heads

Product Features

- HX-150 model offers **adjustable power at dual wavelengths**
- FX-100i model offers **extremely small footprint**
- Compact and robust design for easy integration
- Mechanical reliability complies with MIL-STD-810F and IEC 60601-1 standards
- Simple on/off operation by controller panel or RS-232 interface
- Regulatory certifications available

Product Models

| Product Models | FX-100i/FX-100 | HX-150 | |
|-------------------|----------------|-------------|--------------|
| | | FX-150 | GX-200 |
| Center Wavelength | 805 ± 15 nm | 810 ± 15 nm | 1620 ± 40 nm |
| Average Power | ≥ 100 mW | ≥ 150 mW * | ≥ 200 mW * |
| Pulse Duration | ≤ 120 fs | ≤ 140 fs | ≤ 100 fs |
| Repetition Rate | 75 ± 10 MHz | | |

* At maximum setting

Femtolite **F/G/H** Specifications

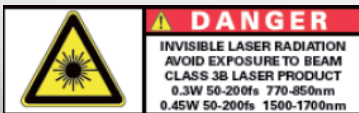
| | FX-100i 805 nm | FX-100 805 nm | FX-150 810 nm | HX-150 | GX-200 1620 nm |
|------------------------|--|-------------------------|--------------------------------|---------------|--------------------------|
| Polarization | ———— Vertical with respect to baseplate ———— | | | | Horizontal* |
| Power Stability | ≤ 1% rms after stabilization at 25 °C | | | | |
| Laser Head Dimensions | 142 x 98 x 76 mm ³ | | 230 x 193 x 76 mm ³ | | |
| Output Aperture Height | 57 mm | | 43 mm | | |
| Laser Head Weight | 1.4 kg | 2 kg | | 3 kg | 2 kg |
| Head Heat Dissipation | < 50 W | | | | |
| Controller Dimensions | 267 x 267 x 133 mm ³ | | | | |
| Controller Weight | 3.5 kg | | | | |
| Operating Voltage | 100-240 VAC at 50-60 Hz | | | | |
| Power Consumption | < 250 W | | | | |

*For HX-150 at maximum setting only

Other Parameters

- Operating Temperature: 20-30 °C
- Storage Temperature: 0-50 °C
- Warm-up Time: ≤ 15 minutes
- Cable Length: 2 m

HX-150 Wavelength Adjustment



HX-150 Warning Label



FX-100i, FX-150 Warning Label

FX-100i Complete System



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