



kW-class high power fiber laser products



Features

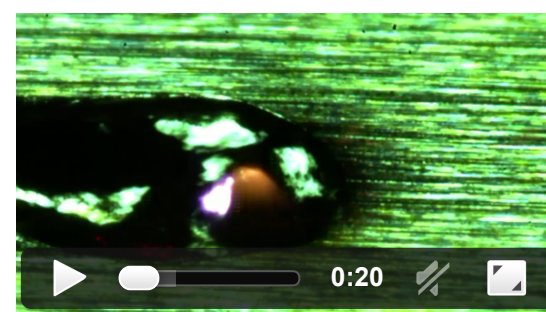
- In-house development and manufacturing for key optical components
- Reliable designing, manufacturing and quality control backed by our proven unique optical technologies as an optical fiber manufacturer
- Uniquely designed optical fiber capable of vertical irradiation
- Stable laser processing by suppression of SRS (Stimulated Raman Scattering)
- High power single mode fiber laser: up to 1kW
- Unique laser diode design optimized for high power (i.e. DCH structure)

Applications

- Cutting or welding of automobile parts (e.g. secondary cell etc.)
- Processing of highly reflective materials such as copper, aluminum
- Warming
- Surface processing



Plasma-fiber-laser hybrid welding



Galvano scanner welding

Specifications

| Model | FLC-1000S-W | FLC-1000M-W | FLC-2000M-W | FLC-3000M-W | FLC-4000M-W | FLC-5000M-W | FLC-6000M-W | FLC-8000M-W |
|---------------------|--------------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Output power (W) | 1000 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 8000 |
| Wavelength | 1070 nm | | | | | | | |
| Optical mode | Single-mode | Multi-mode | | | | | | |
| Operating mode | CW/Modulated | | | | | | | |
| Maximum modulation | 10 kHz | | | | | | | |
| Power stability | ≦ 2% | | | | | | | |
| Fiber core diameter | — | 100 um *1 | | | | | | |
| N.A. | ≦ 0.1 | | | | | | | |
| Beam quality | $M^2 \leq 1.4$ | $BPP \leq 4.5 \text{ mm} \cdot \text{mrad} *2$ | | | | | | |
| Fiber termination | QBH-type connector | | | | | | | |

| | | |
|---------------------------------|--|-------------|
| Dimensions(HxWxD) | 1211 × 756 × 1360 mm | |
| Delivery fiber length(standard) | 10 m | 10 m / 20 m |
| Cooling | Water cooling | |
| Power supply | Three-phase AC180-240V or AC360-440V, 50 / 60 Hz | |
| Control mode | Analog, RS-422, Ethernet | |

※1 Fiber core options other than 100um are available

※2 When using 100um core diameter feed fiber

※ For more detailed specifications, please fill out [the form](#) to contact us

※ This product is subject to the export regulations and restrictions of Japan

Why choose Fujikura?

Stability / Reliability / Robustness

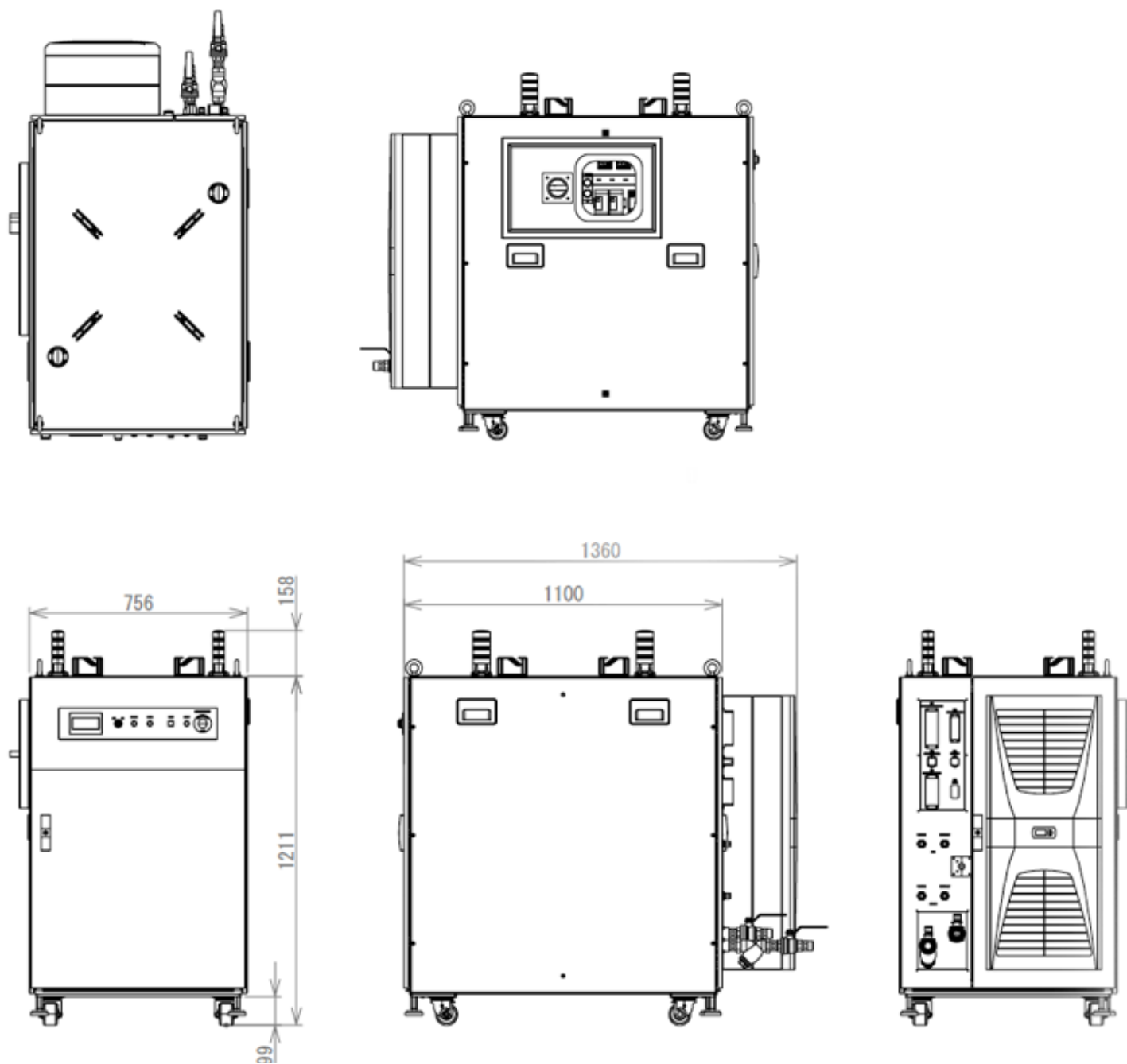


Unprecedented vertical irradiations

90 degrees

See the quick demo ▶

Layout



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