

multimode fiber laser



MODULAR LASER SOURCES WITH POWER OF 3 – 24 kW AND SPLICED FIBERS OF 50 – 100 μm OR PLUGGED FIBERS OF 100 – 1,000 μm

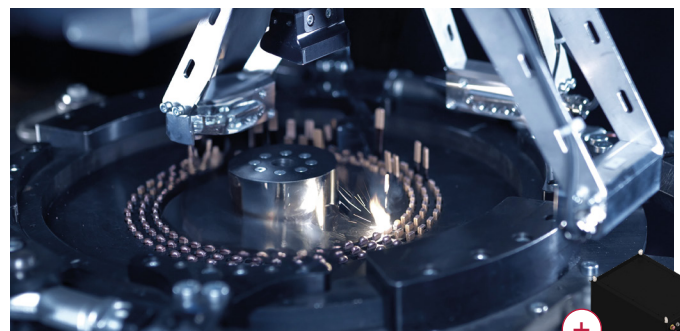
Brightlight lasers are offered in combination with various Scansonic optics for laser welding, brazing, cladding, cutting and hardening. Brightlight is supported by Scansonic's worldwide sales and service network as well as Scansonic's development teams.



APPLICATION EXAMPLES



Bundle of SCut optics with laser and spliced 100 μm fiber



Bundle of FCW optics with laser and spliced 50 μm fiber



LASER SPEC.

| | |
|-----------------------------|------------------|
| Operation mode | Multimode |
| Polarization | random |
| Central emission wavelength | 1080 nm |
| Output Power | 3 - 24 kW |
| Power range | 1% – 100% |
| Output emission bandwidth | +/- 5 nm |
| Modulation frequency | 10 kHz |
| Switching time | 25 μs |

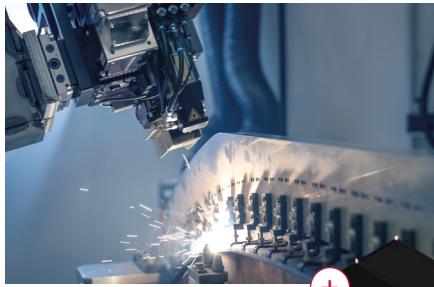
OPTICAL OUTPUT SPEC.

| | |
|--|--|
| Delivery cable connector | QBH (up to 9 kW), QD, Q+ |
| Delivery Diameter / color / cable type | 13 mm / yellow / metal shielded cable |
| Beam quality M^2 | 4 - 20 |
| Delivery cable diameter output | 50 μm up to 6 kW, 100 μm |
| Delivery cable length | 20 m (longer distance on request) |

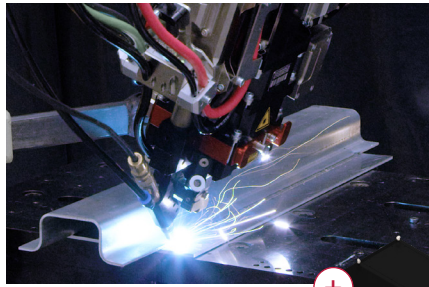
ELECTRICAL SPEC.

| | |
|--------------------|---------------|
| Voltage | 360 V - 440 V |
| Max. input current | 16 A - 125 A |
| Frequency | 50 Hz / 60 Hz |
| Max. input power | 10 kW - 75 kW |

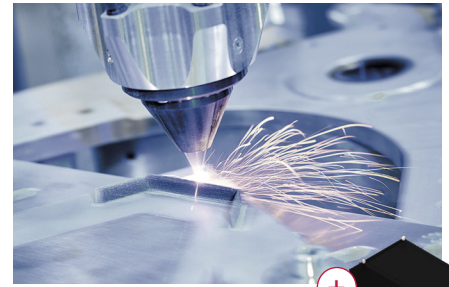
APPLICATION EXAMPLES



Bundle of RLW-A optics with laser and plugged 200 µm fiber



Bundle of AL04 optics with laser and plugged 600 µm fiber



Bundle of cladding optics with laser and plugged 1,000 µm fiber

MECHANICAL SPEC.

Dimensions (L x H x B)

Cabinet size small

Cabinet size medium

Cabinet size large

Spliced

892 mm x 433 mm x 744 mm

868 mm x 543 mm x 1013 mm

995 mm x 960 mm x 1203 mm

Plugged

900 mm x 575 mm x 744 mm

900 mm x 685 mm x 978 mm

995 mm x 960 mm x 1399 mm

Weight

180 kg - 540 kg

200 kg - 575 kg



up to 9 kW



up to 15 kW



up to 24 kW

ENVIRONMENTAL SPEC.

Operation temperature range

0 °C – 40 °C

Storage temperature range

-10 °C – 50 °C

Operation humidity

0% – 95%

Storage humidity range

0% – 95%

COOLING SPEC.

Water temperature

20 °C - 25°C

Water pressure

3 - 5 bar

Flow rate

25 l/min - 200 l/min (each 3 kW laser power 25 l/min)

Cooling capacity

6 kW - 48 kW (each 3 kW laser power 9 kW + 1 kW)