# QYL 1500W~3000W Single-mode QCW Fiber Laser

## PRODUCT DESCRIPTION

CINA LASER QYL series single-mode quasi continuous wave fiber lasers are ideal for applications requiring high peak power and small focal spot in pulsed operation mode , and a variety of microwelding and microdrilling applications.

The single-mode QCW Series fiber lasers are offered as both end user friendly rack units and OEM modules for system integrators. Water-cooling lasers are substantially more cost-effective than lamp-pumped YAG lasers due to wall-plug efficiencies >30% and maintenance-free operation.


CINA LASER, which is based on Internet technology, established a scientific after-sales service system. Each device has a unique identity code (the internal storage of original technology and material information). Can achieve remote online real-time monitoring; can provide users with equipment fault early warning and efficient technical support and good after-sales service.

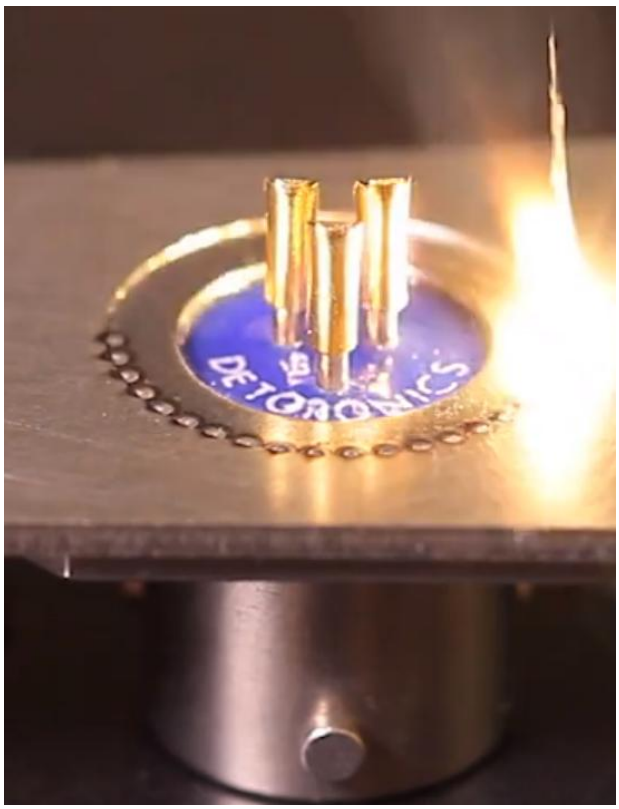
## PRODUCT FEATURE

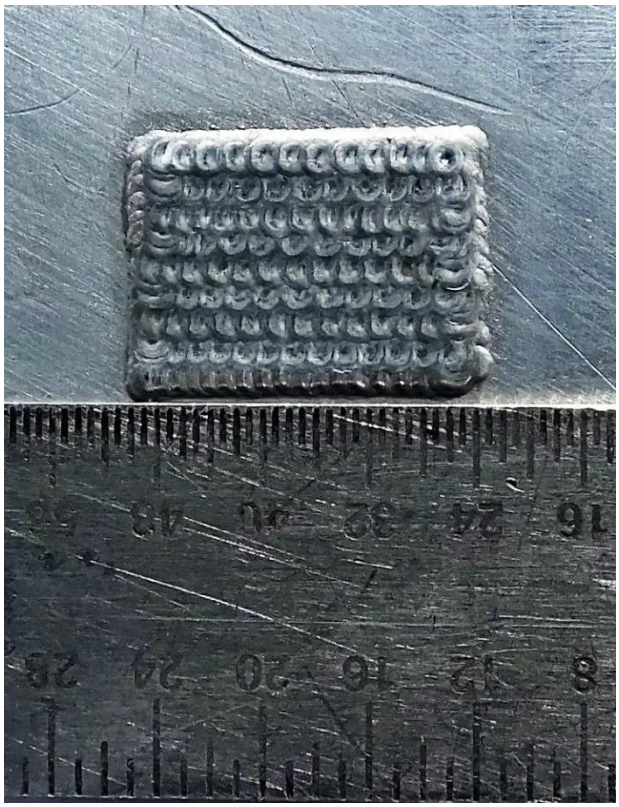
- Ideal Replacement for Lamp Pumped YAG Lasers
- Perfect Beam Quality
- Outstanding Pulse Power/Energy Stability
- Water-cooling Rack Units or OEM Modules

►Highly Efficient >30% Wall-plug Efficiency

## MAIN APPLICATION

- Spot & Seam Welding of Various Precision Welds
- Microkeyhole and Conduction
- Cutting of Sapphire, Ceramics and Silicon
- Microdrilling of Metals and Non-metals
- Batteries, Medical Devices, Electronic Components

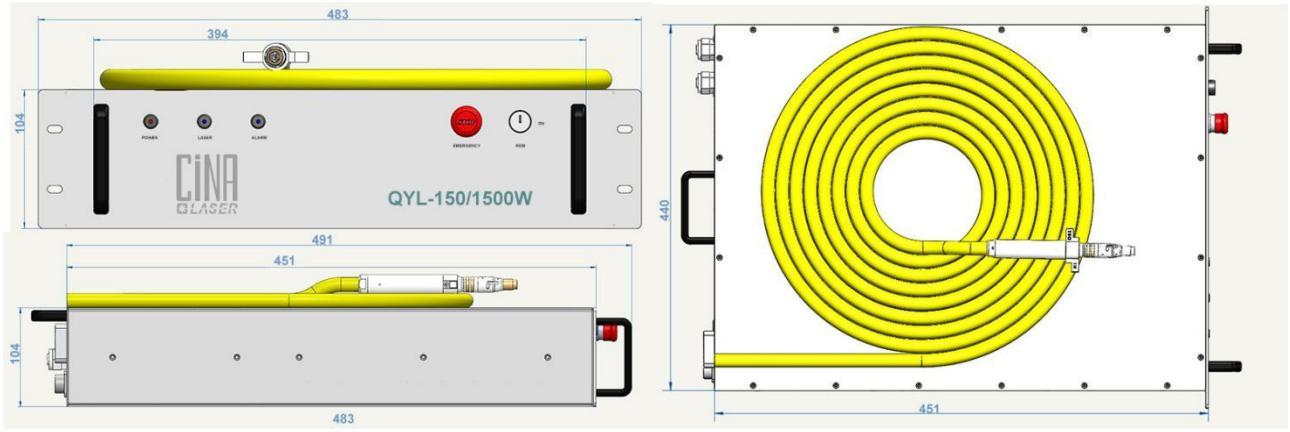


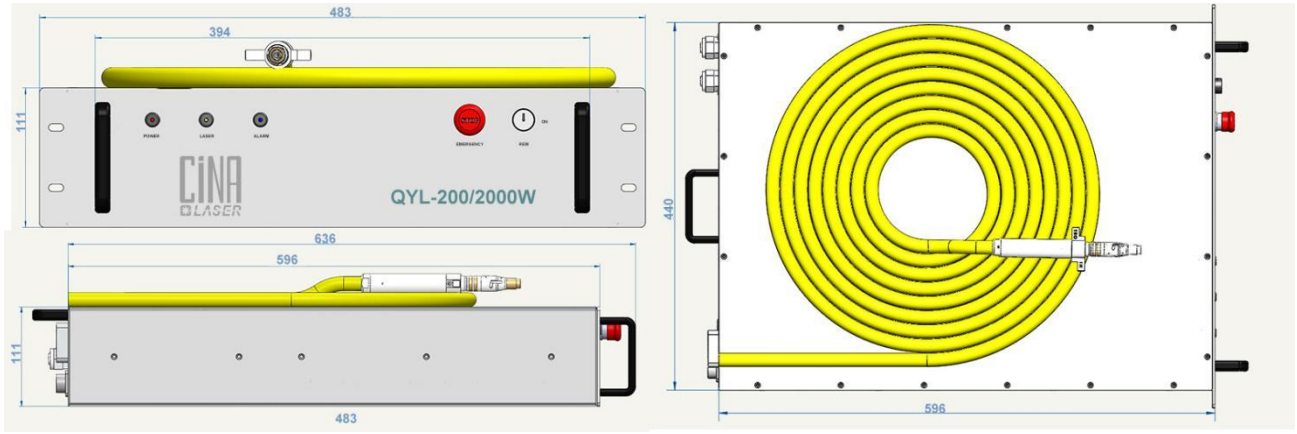


# TECHNIQUE INDEX

| Parameter | | | Index | | | Supplement |
|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | |
| Optic Feature | Max. Power QCW mode | W | | 1500 | | 150/1500 |
| | | | | 2000 | | 200/2000 |
| | | | | 3000 | | 300/3000 |
| | Max. Power CW mode | W | | 150 | | 150/1500 |
| | | | | 200 | | 200/2000 |
| | | | | 300 | | 300/3000 |
| | Maximum Pulse Energy | J | | 15 | | 150/1500 |
| | | | | 20 | | 200/2000 |
| | | | | 30 | | 300/3000 |
| | Power Tunability | % | 10 | | 100 | |
| | Modulation frequency. | KHz | 1 | | 50 | |
| | Pulse Duration | Ms | 0.1 | | 50 | |
| | Duty Cycle Range | % | 0 | | 50 | |
| | Central wavelength | nm | 1070 | 1080 | 1090 | 100% continuous |
| | Optical Efficiency | % | | 80 | | 10~100% Linear Fit |
| | Wall-plug Efficiency | % | | 35 | | 10~100% Linear Fit |
| | Spectral bandwidth（3dB） | nm | | 3 | | 100% continuous |
| Electrical cooling Feature | Short-Term Stability | % | | 3 | | 100% continuous >1h |
| | Beam Quality M2 | | | 25/400μm=1.3 | | 100% continuous |
| | | | | 50/400μm=2.8 | | |
| | Laser on time | μs | | 50 | 100 | 10% → 90% output |
| | Laser off time | μs | | 50 | 100 | 90% → 10% output |
| | Power of Red Indicator Light | μW | 100 | | | 100% output |
| | Output fiber length | m | | 10 | | |
| | Output fiber bending radius | mm | 200 | | | |
| | Output fiber core diameter | μm | 50(25,100 Customizable ) | | | |
| | Output connector | | Standard QCS/QBH（LOC） | | | |
| | Size (L)× (W)× (H) | (mm) | 451×483×104 | | | 150/1500 |
| | | | 596×483×111 | | | 200/2000 |
| | | | 666×483×111 | | | 300/3000 |
| | Weight | (kg) | 38 | | | 150/1500 |
| | | | 43.4 | | | 200/2000 |
| | | | 63 | | | 300/3000 |

## DIMENSIONS


483
394
104
QYL-150/1500W
491
451
104
483
440
451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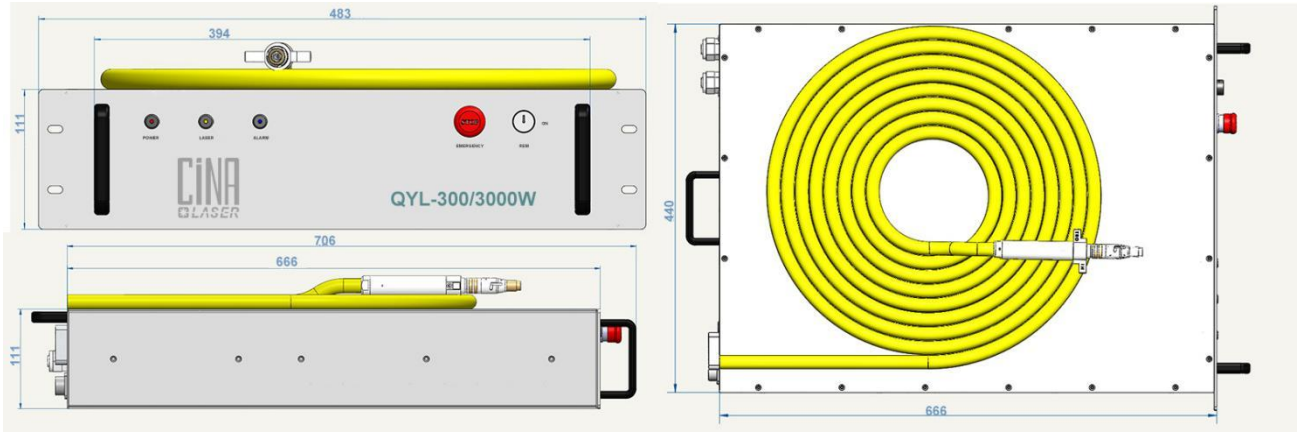
111
QYL-200/2000W
636
596
111
483
440
596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394
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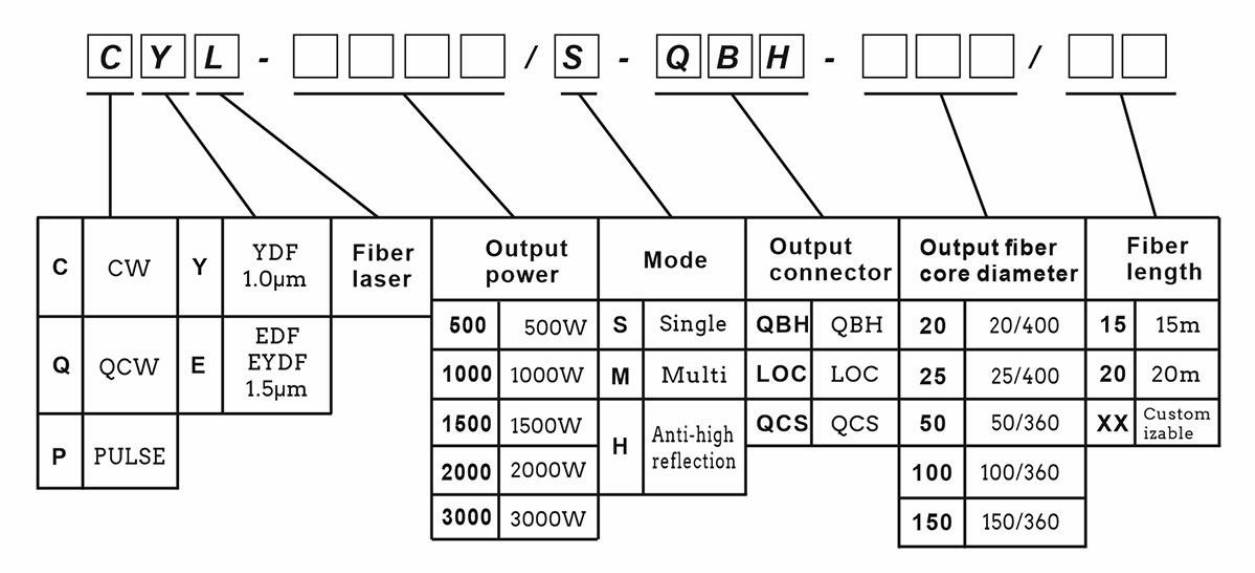
## ORDER INFORMATION




| | | | | |
|---|---|---|---|---|
| C | CW | Y | YDF 1.0μm | Fiber laser |
| Q | QCW | E | EDF EYDF 1.5μm | |
| P | PULSE | | | |

| | |
|---|---|
| 500 | 500W |
| 1000 | 1000W |
| 1500 | 1500W |
| 2000 | 2000W |
| 3000 | 3000W |

| | |
|---|---|
| S | Single |
| M | Multi |
| H | Anti-high reflection |

| | |
|---|---|
| QBH | QBH |
| LOC | LOC |
| QCS | QCS |

| | |
|---|---|
| 20 | 20/400 |
| 25 | 25/400 |
| 50 | 50/360 |
| 100 | 100/360 |
| 150 | 150/360 |

| | |
|---|---|
| 15 | 15m |
| 20 | 20m |
| XX | Customizable |