

# CYL-1000/S

## 1.0 $\mu$ m Single-Mode Group Continuous Fiber Laser

### PRODUCT DESCRIPTION

GT Lasers's CYL-1000/S 1.0 $\mu$ m single-mode group continuous fiber laser, adopts latest industry technology and the optimization design, with high electro-optical conversion efficiency, high lifetime, high safety and reliability. The unit with high-quality output beam and strong capability on resisting high-reflective, can be widely used in all kinds of materials of laser cutting, welding, punching, 3D printing and other high-end smart manufacturing.

GT Lasers, 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.

GT Lasers's products with high quality, high reliability and excellent cost performance, can meet the requirements of the customer diversification and personalized customization. It also with good after-sales service, is the ideal choice for system integrates and equipment manufacturers.



### PRODUCT FEATURE

- ▶ High wall plug efficiency, greatly reduce power consumption
- ▶ Strong capability on resisting high-reflective, suitable for different materials processing.
- ▶ Remote real-time monitoring.
- ▶ High lifetime, high safety and reliability.
- ▶ Can achieve personalized customization.
- ▶ Excellent after-sales service system.
- ▶ Excellent cost performance

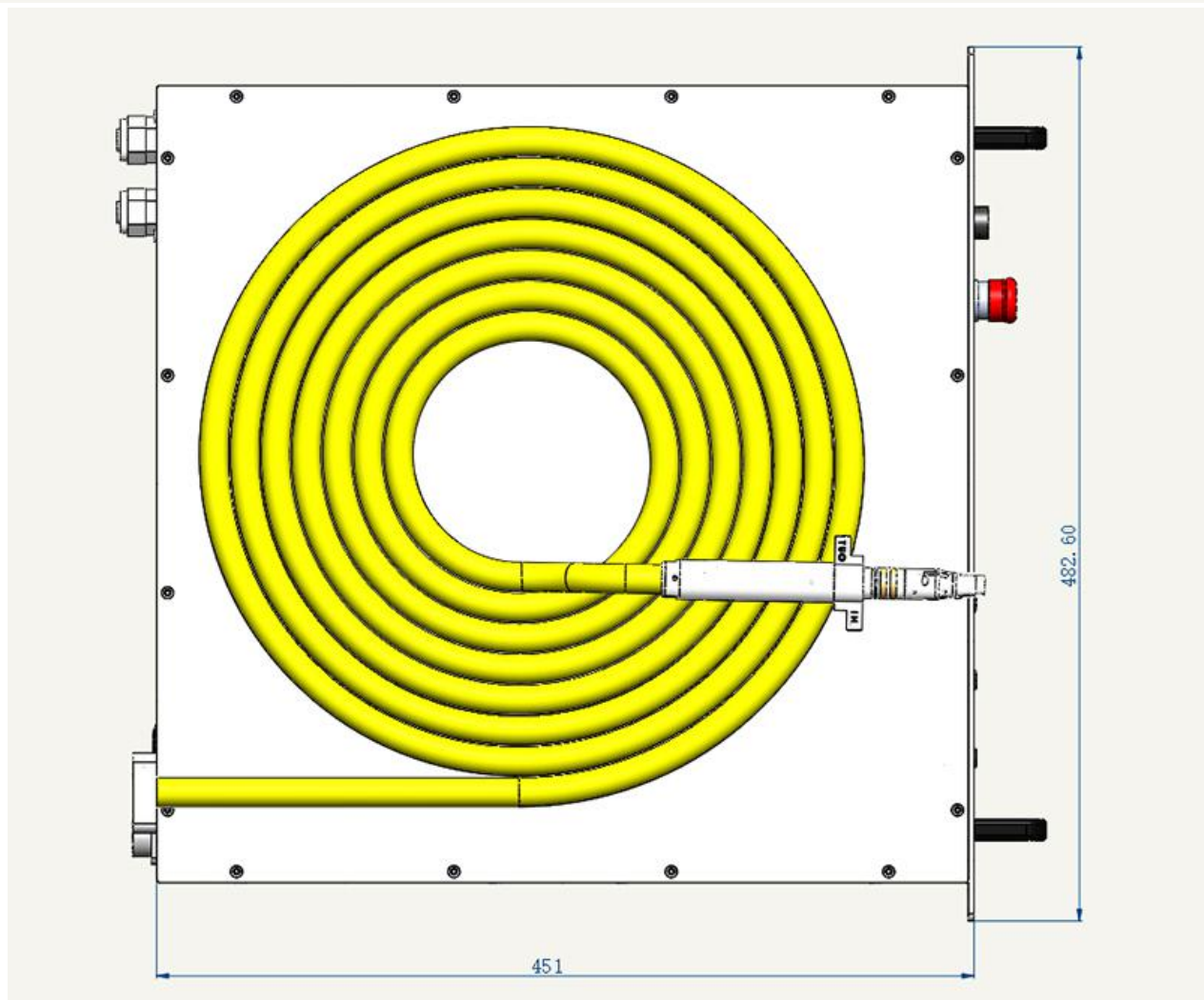
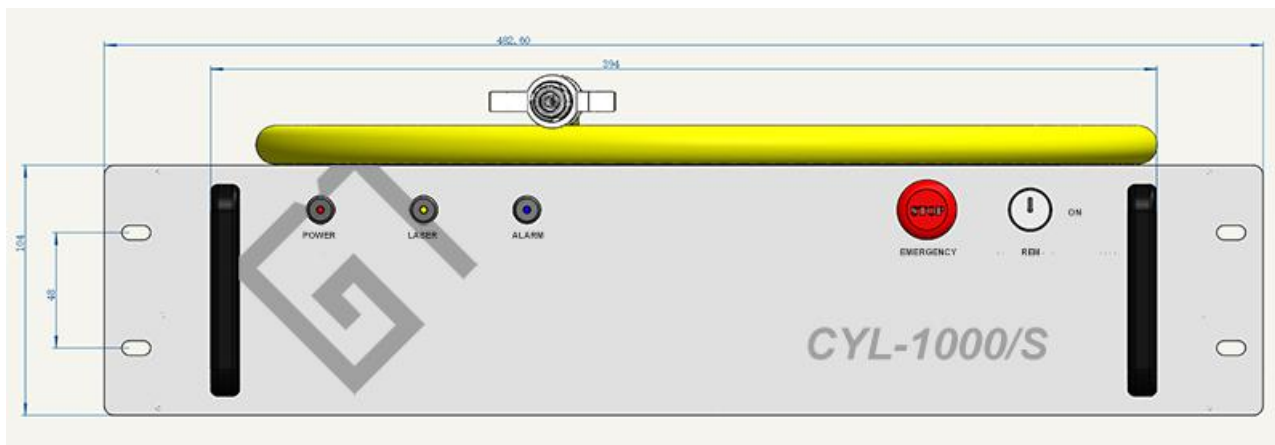
### MAIN APPLICATION

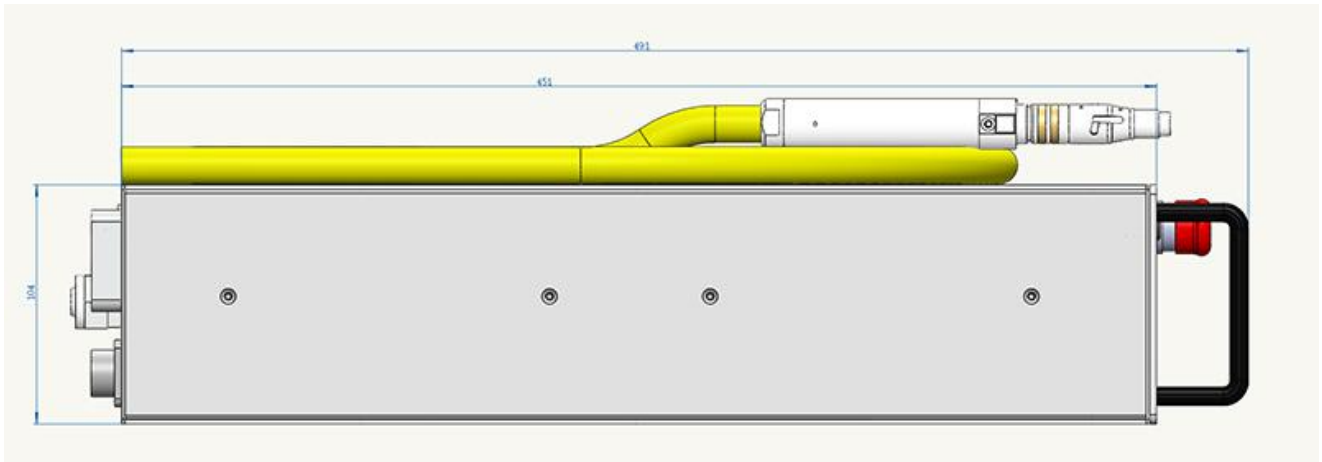
- ▶ Laser cutting.
- ▶ Laser welding.
- ▶ Laser cladding.
- ▶ Laser brazing.
- ▶ Laser thermolizing.

## TECHNIQUE INDEX

| Performance                |                             |                   | Min.                        | Typ. | Max. | Supplement            |
|----------------------------|-----------------------------|-------------------|-----------------------------|------|------|-----------------------|
| Optic Feature              | Central wavelength          | (nm)              | 1070                        | 1080 | 1090 |                       |
|                            | Spectral bandwidth          | (nm)              |                             | 3    | 5    | -3dB                  |
|                            | Output optical power        | (W)               |                             | 1000 |      |                       |
|                            | Power ADJ. range            | (%)               | 10                          |      | 100  |                       |
|                            | Output power stability      | (%)               |                             | 1    | 1.5  | 100% continuous > 1h  |
|                            |                             |                   |                             | 2    | 3    | 100% continuous > 24h |
|                            | Beam quality                | (M <sup>2</sup> ) |                             |      | 1.3  | QBH-20/400            |
|                            |                             |                   |                             |      | 2.8  | QBH-50/360            |
| Output Feature             | Modulation frequency.       | (KHz)             |                             |      | 20   | 100% output           |
|                            | Glow power                  | (mW)              | 0.3                         |      | 1.0  |                       |
|                            | Output connector            |                   |                             | QBH  |      | Customize             |
|                            | Output fiber core-diameter  | (μm)              |                             | 20   | 100  |                       |
|                            | Output fiber length         | (m)               |                             | 15   |      | Customize             |
|                            | Output fiber bending radius | (mm)              | 200                         |      |      |                       |
|                            | Working mode                |                   | Continuous modulation       |      |      | CW/Modulate           |
| Electrical cooling Feature | Polarization state          |                   | Random                      |      |      | Random                |
|                            | Telecommunication port      |                   | RS232 / AD / Super terminal |      |      |                       |
|                            | Remote telecommunication    |                   | APP                         |      |      | Customize             |
|                            | Power supply                | (V)               |                             | 220  |      | Two phase three wire  |
|                            | Power consumption           | (KW)              |                             |      | 3.0  |                       |
|                            | Cooling method              |                   | Water-cooling               |      |      | Circumscribed         |
|                            | Coolant temp.               | (°C)              | 21                          |      | 25   |                       |
| General Feature            | Coolant flow                | (L/min)           |                             | 10   |      |                       |
|                            | Working environment temp.   | (°C)              | 10                          |      | 40   |                       |
|                            | Working environment         | (%)               | 10                          |      | 85   |                       |
|                            | Storage temp.               | (°C)              | -10                         |      | 60   |                       |
|                            | Weight                      | (kg)              |                             | 38   |      |                       |
|                            | Structure                   |                   | Machine cabinet             |      |      |                       |
|                            | Size (W) × (L) × (H)        | (mm)              | 482.6 × 674 × 176           |      |      | With hook             |

## SIZE





## ORDER INFORMATION

**C** **Y** **L** - □ □ □ □ / **S** - **Q** **B** **H** - □ □ □ / □ □

| C | Continuous wave | Y | YDF 1.0 μm      | Optical fiber laser | Output powers |       | Mode group |             | Output connector |     | Output fiber core-diameter |         | Fiber length |           |
|---|-----------------|---|-----------------|---------------------|---------------|-------|------------|-------------|------------------|-----|----------------------------|---------|--------------|-----------|
| P | Puls            | E | EDF EYDF 1.5 μm |                     | 1000          | 1000W | S          | Single-mode | QBH              | QBH | 050                        | 50/360  | 15           | 15m       |
|   |                 |   |                 |                     |               |       | M          | Multi-mode  | LOC              | LOC | 100                        | 100/360 | 20           | 20m       |
|   |                 |   |                 |                     |               |       |            |             | QCS              | QCS | 150                        | 150/360 | XX           | Customize |
|   |                 |   |                 |                     |               |       |            |             |                  |     | 200                        | 200/360 |              |           |
|   |                 |   |                 |                     |               |       |            |             |                  |     | 030                        | 30/400  |              |           |
|   |                 |   |                 |                     |               |       |            |             |                  |     | 020                        | 20/400  |              |           |