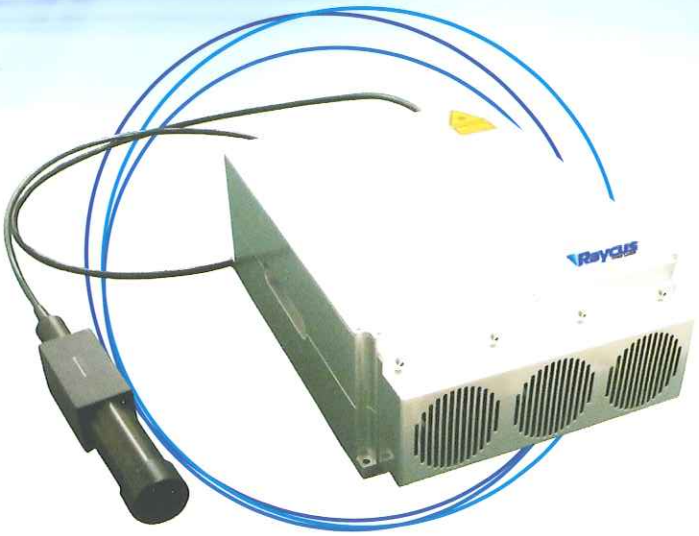
Pulsed Fiber Laser

Product descriptions

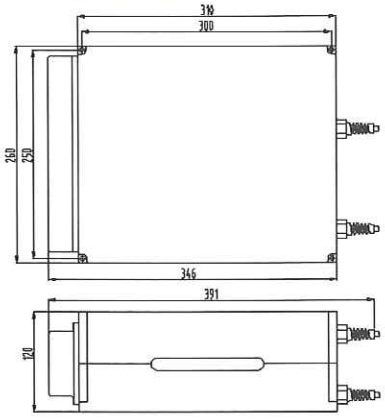
5W–50W Pulsed fiber laser can be used for marking different materials including metals such as gold, silver, copper and nonmetals with small spotsize, high power density and stability.



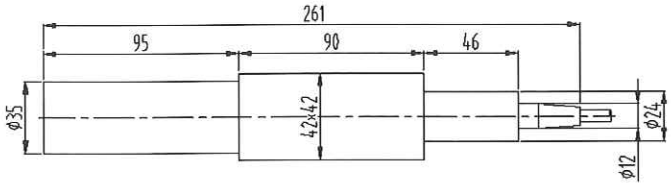
Applications

- Marking
- Resistance Modulation
- Micromachining
- Stencil engraving
- Welding
- Cutting
- Drilling
- Cutting silicon wafers for solar panels

Dimensions



Laser module dimension



Optical isolator dimension

Technical parameters

Operating mode	5W Pulsed	10W Pulsed	15W Pulsed	20W Pulsed	25W Pulsed	30W Pulsed	50W Pulsed
Central emission wavelength (nm)	1064 ± 1	1064 ± 1	1064 ± 1	1064 ± 1	1064 ± 1	1064 ± 1	1064 ± 1
Polarization	random	random	random	random	random	random	random
Optical isolator	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nominal average output power (W)	5	10	15	20	25	30	50
Single pulse energy (mJ) @20kHz	0.25	0.5	0.75	1	1.25	1 (@30kHz)	1 (@50kHz)
Beam quality (M^2)	<1.3	<1.4	<1.4	<1.8	<1.8	<1.8	<2
Pulse width (ns) @20kHz	<60	<80	<80	<90	<90	<120 (@30kHz)	<140 (@50kHz)
Repetition rate adjustment range (kHz)	20–80	20–80	20–80	20–80	20–80	30–80	⩾50
Power adjustment range (%)	5–100	5–100	5–100	5–100	5–100	5–100	5–100
Output fiber cable length (m)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Working voltage (DCV)	24	24	24	24	24	24	24
Power consumption (20℃) (W)	25	50	100	140	220	300	440
Cooled	wind	wind	wind	wind	wind	wind	wind
Dimension W × D × H (mm)	391 × 260 × 120	391 × 260 × 120	391 × 260 × 120	391 × 260 × 120	391 × 260 × 120	391 × 260 × 120	391 × 260 × 120
Weight (kg)	9.5	9.5	9.5	9.5	9.5	9.5	9.5