



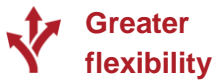
redENERGY G4

Pulsed Fiber Laser
Wavelength: 1060nm

50W EP-Z



Benefits



Greater flexibility

Range of pulses for new and improved applications



Superior quality

Industry leading reliability and product warranty



Increased productivity

Higher powers and pulse rates for faster processing



Improved profitability

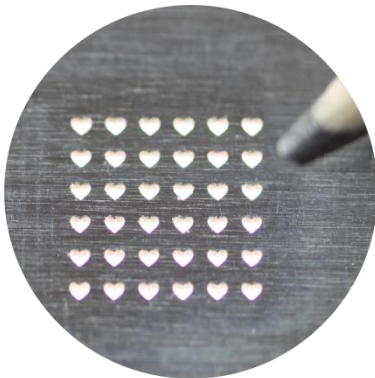
Low cost of ownership with no service requirements

Applications

- Ablation
- Cleaning
- Drilling
- Engraving
- Marking
- Micro-machining
- Precision cutting
- Scribing
- Solar cell processing
- Thin film patterning
- Thin foil cutting
- Welding

50W EP-Z is ideal for...

High quality cutting & drilling
With pulse energy >1mJ



- Cutting metal foils up to 0.5mm
- Drilling holes down to 60µm

High quality engraving
With peak power >10kW



- Engraving metals
- Surface texturing

High speed marking
With PRF up to 1MHz



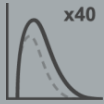
- Paint on plastics/metals
- White/black mark on metals



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50W EP-Z

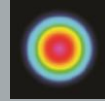
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PulseTune functionality

EP Series

- Up to 40 optimised PulseTune waveforms
- Single shot to 4 MHz pulse repetition frequency



Beam quality

Z Type ($M^2 < 1.6$)

- Higher peak power and pulse energy with only minor increase in spot size and good depth of focus

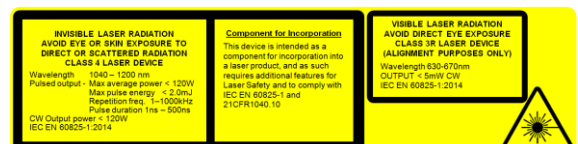
Laser characteristics

Parameter	Unit	SP-050P-A-EP-Z
Central emission wavelength	nm	1059 - 1065
Nominal average output power	W	50
M^2		<1.6
Collimated beam diameter	mm	3 / 5 / 7.5 / 10
PulseTune waveforms		38
Maximum pulse energy	mJ	>1
Maximum peak power	kW	>10
Pulse duration range	ns	6 - 500
Pulse repetition frequency (PRF) range	kHz	1 - 1000
CW mode (with modulation)	kHz	YES (1 - 100)

System integration details

Parameter	Unit	SP-050P-A-EP-Z
Cooling		Air
Beam delivery cable length	m	3
Laser module dimensions	mm	347 x 201 x 95
Power supply voltage	V DC	24
Power supply requirement	W	300
Operating temperature range	°C	0 to +40
Relative humidity range		5-95% RH (non-condensing)

To learn more about our redENERGY G4 Fiber Laser products visit our website: www.spilasers.com



Terms and Conditions

All product information is believed to be accurate and subject to change without notice. A complete product specification will be issued on request and also at time of order acknowledgement. The user assumes all risks and liability whatsoever in connection with the use of the product and its application. These lasers are designed as products for incorporation or integration into other equipment.