



redENERGY G4

Pulsed Fiber Laser
Wavelength: 1060nm


50W HS-S



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**

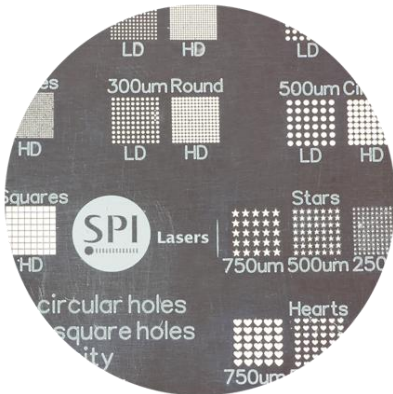
Low cost of ownership with no service requirements

Applications

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

50W HS-S is ideal for...

High quality cutting & drilling
With peak power >7kW



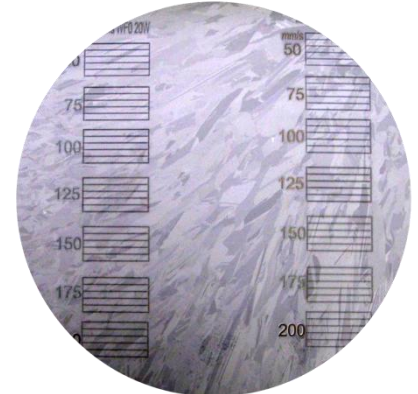
- Cutting metals & ceramics
- Drilling holes down to 30µm

High speed micro-machining
With small spot sizes ($M^2 < 1.3$)



- Cutting & engraving with small features sizes

High quality scribing
With pulse energy >0.7mJ



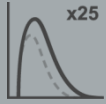
- Silicon processing
- Ceramics



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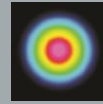
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PulseTune functionality

HS Series

- Up to 25 PulseTune waveforms
- Single shot to 1 MHz pulse repetition frequency



Beam quality

S Type ($M^2 < 1.3$)

- Generating very fine spot sizes (<20µm possible) with high stability and large depth of focus

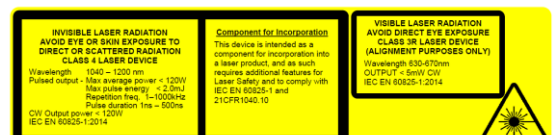
Laser characteristics

Parameter	Unit	SP-050P-A-HS-S
Central emission wavelength	nm	1059 - 1065
Nominal average output power	W	50
M^2		<1.3
Collimated beam diameter	mm	3 / 5 / 7.5 / 10
PulseTune waveforms		24
Maximum pulse energy	mJ	>0.7
Maximum peak power	kW	>7
Pulse duration range	ns	11 - 220
Pulse repetition frequency (PRF) range	kHz	1 - 1000
CW mode (with modulation)	kHz	YES (1 - 100)

System integration details

Parameter	Unit	SP-050P-A-HS-S
Cooling		Air
Beam delivery cable length	m	2
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 +42
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.