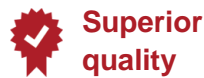




Benefits



Range of pulses for new and improved applications



Industry leading reliability and product warranty



Higher powers and pulse rates for faster processing



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

20W EP-S is ideal for...

High quality marking
With pulse duration 3-500ns



- Black mark anodised aluminium
- White marking metals

High quality cutting & drilling
With peak power >7kW



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

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



- Engraving metals
- Surface texturing



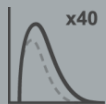
Lasers

redENERGY G4

20W EP-S

Pulsed Fiber Laser

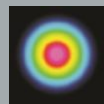
Wavelength: 1060nm



PulseTune functionality

EP Series

- Up to 40 optimised PulseTune waveforms
- Single shot to 4 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-020P-A-EP-S
Central emission wavelength	nm	1059 - 1065
Nominal average output power	W	20
M^2		<1.3
Collimated beam diameter	mm	3 / 5 / 7.5 / 10
PulseTune waveforms		40
Maximum pulse energy	mJ	>0.7
Maximum peak power	kW	>7
Pulse duration range	ns	3 - 500
Pulse repetition frequency (PRF) range	kHz	1 - 1000
CW mode (with modulation)	kHz	YES (1 - 100)

System integration details

Parameter	Unit	SP-020P-A-EP-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	250
Operating temperature range	°C	0 to +45
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.