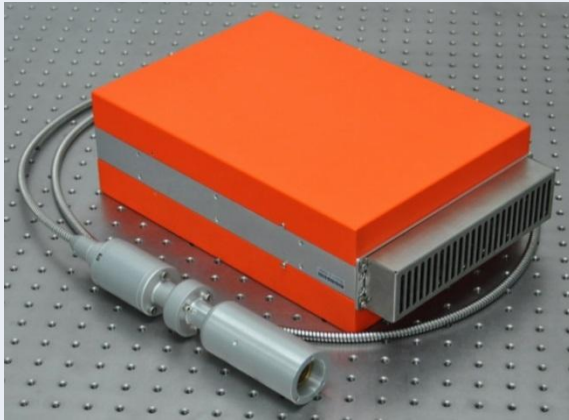


IFL-20P-LM-S

20W Short Pulse Fiber Laser

IFL-20P-LM-S (S-series) is design with integrated cooling and iLuma's unique SRS suppression technology. The 20P-LM-S series pulse laser provides the user the ability to select pulse durations from 1.5ns to 10ns and has been designed to give optimal peak power and pulse energy over this range. It also has the ability to deliver pulses at repetition rates from a single shot to 1MHz increasing flexibility and processing speed. This features makes the 20P-LM-S series fiber laser the choice laser source for novel applications, such as thin film removal, resistor trimming and anodised Al black marking.

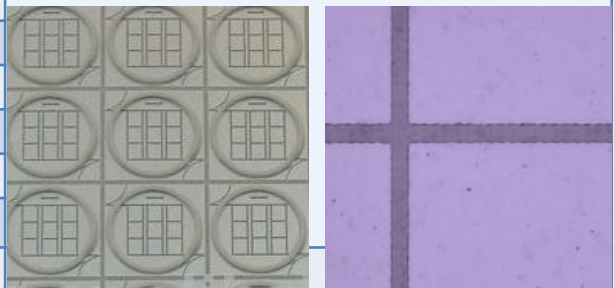


Features:

- ✓ Integrated heatsink and cooling fans
- ✓ Peak power up to 25KW
- ✓ Rep Rate from 200KHz* to 1000 KHz
- ✓ Pulse Duration from 1.5ns to 10ns
- ✓ Beam Quality $M^2 < 2$
- ✓ Tunable Pulse Duration
- ✓ Tunable Onset of First pulse
- ✓ 2 years warranty
- ✓ Optimised Peak Power over all Rep Rates
- ✓ Integrated Isolator with Beam Delivery Optics
- ✓ SCSI Hardware and RS-232 Software Control
- ✓ Real time monitoring & Shutdown Protection

Applications:

- ✓ Black Marking on Anodized Al
- ✓ Laser Pattern Silver Micro-wire
- ✓ Non-foaming Plastic Marking
- ✓ Poly-compounds Marking
- ✓ IC Marking
- ✓ ITO Film removal
- ✓ Mono silicon, Poly silicon Processing
- ✓ Resistor Trimming
- ✓ Solar Cell Scribing
- ✓ Metal Marking, Color Marking
- ✓ Ceramic Marking & Scribing



*Single Shot and pulses on demand available

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Product Specification:

Product Name	20W LM-S	30W LM-S*
Product Code	IFL-20P-LM-S-1	IFL-30P-LM-S-1
Average Power	20W	30W
Central Wavelength	1060 ± 5 nm	1060 ± 5 nm
Pulse Duration	1.5ns – 10ns	1.5ns – 10ns
Max Peak Power	20KW	25KW
Full Power of Rep rate	200 - 1000kHz	300 - 1000kHz
Output Power Stability	5%	5%
Max Pulse Energy	100uJ	100uJ
Beam size	5– 9mm	5– 9mm
M ²	≤ 2	≤ 2
Polarization	Random	Random
Length of cable	2 m	2 m
Weight of Module	< 6kg	< 6kg
Dimension of Module	360 x 210 x 100 mm	360 x 210 x 100 mm
Operation Temp.	5°C - +55°C	5°C - +55°C
Storage Temp.	-10°C - + 70°C	-10°C - + 70°C

* will be launched in year 2014

Product Order Code:

Co., Code	Average Power Code	Beam Quality Code	Pulse Feature Code	Wavelength Code	BET Code
IFL	15P	SM	N	1	A
	20P	LM	S	2	B
	30P	HM	P	3	C
	40P		C	4	D
	500C		L		E
Notes	15P-15W Pulse	SM-Single Mode	N- Pulse, 4ns-350ns,	1-1060nm	A- Without BET
	20P-20W Pulse	LM-Low Mode	S-Short Pulse, 1.5ns-10ns	2-1550nm	B- 3 X BET
	30P-30W Pulse	HM-Multi-Mode	P-ps Pulse, 700ps-10ns	3-532nm	C- 5X BET
	500C-500W CW		C-CW/Modulation	4-2000nm	D- 7X BET
			L-Smart ns Pulse		E- 9X BET
Example	Product Code	Description			
1	IFL-20P-LM-N-1-D	20W Pulse (1060nm), low mode , M2<2, Pulse Width 4ns-350ns, With 7X BET			
2	IFL-20P-SM-S-1-B	20W Pulse (1060nm), Single Mode, M2<1.3, Pulse Width 1.5ns-10ns, With 3X BET			
3	IFL-20P-SM-P-1-C	20W ps Pulse(1060nm), Single Mode, M2<1.3, Pulse Width 700ps-10ns, With 5X BET			

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