



WUHAN SKY FIRE TECHNOLOGY CO.,LTD

No.99 Jinxiu Avenue, Wulijie Street, Jiangxia District, Wuhan, Hubei, China

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Tel: +86 15527861820

FFRC-15H-E and FFRC-20H-E

Characteristics		
Model	FFRC-15H-E	FFRC-20H-E
Operating mode	CW/modulated	CW/modulated
Polarization	Random	Random
Output power tunability (%)	10 - 100	10 - 100
Beam quality (m ²)	< 1.5	< 2
Output power instability at 25°C (%)	< ±1.5	< ±1.5
Central wavelength (nm)	1080±5	1080±5
Spectrum width FWHM (nm)	< 6	< 6
Modulation frequency (kHz)	5	5
Red laser power (μ w)	> 200	> 200
Output cable parameters		
Output mode	QBH	QBH
Output fiber core diameter (μ m)	20	30
Cable length (m)	10	10
Bending radius of cable (mm)	200	200
Electrical characteristics		
Operating voltage (V)	200 – 240VAC,1PH 50/60Hz	200 – 240VAC,1PH 50/60Hz
Rated power consumption (kW)	4	6
Control mode	AD	AD
Other parameters		
Operating temperature (°C)	10 - 40	10 - 40
Relative humidity (%)	10 - 70	10 - 80
Cooling method	Water cooled	Water cooled
Water-cooling temperature (°C)	25±1	25±1
Water-cooling flow (L/min)	>20 (laser), 1.5-2.5 (QBH)	>20 (laser),1.5-2.5 (QBH)
Water-cooling pressure (bar)	3 - 5	3 - 5
Joint diameter (mm)	12	12
Dimensions(W*D*H)(mm)(including handle)	482*450*105	482*450*105
Weight (kg)	23±3	28±3



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FRFC-1500H-E~FFRC-3000H-C

Optical Characteristics			
Model	FRFC-1500H-E	FRFC-2000H-E	FFRC-3000H-C
Output Power (W)	1500	2000	3000
Operating Mode	CW/Modulated	CW/Modulated	CW/modulated
Polarization	Random	Random	Random
Power Range (%)	10 – 100	10 – 100	10 - 100
Beam Quality (M ²)	1.2	1.2	< 1.5
Output Power Instability at 25°C (%RMS)	< 1.5 (2 Hours)	< 1.5 (2 Hours)	< ±1.5
Central Wavelength (nm)	1080 ± 5	1080 ± 5	1080±5
Spectrum Width FWHM (nm)	< 6	< 6	< 6
Modulation Frequency (kHz)	5	5	5
Red Laser Power (mW)	> 200	> 200	> 200
Output Cable Parameters			
Output Mode	QBH	QBH	QBH
Cable Length (m)	10	10	15
Output Fiber Core Diameter (μm)	20 / 50	30 / 50	34/50
Minimum Bending Radius of Cable (mm)	200	200	200
Electrical Characteristics			
Operating Voltage (VAC)	200 – 240, 1PH 50/60Hz	200 – 240, 1PH 50/60Hz	340 – 420VAC, 3P4W 50/60Hz
Rated Power Consumption (kW)	5	6	9
Control Mode	AD	AD	RS232, AD, Ethernet
Other Parameters			
Operating Temperature (°C)	10 – 40	10 – 40	10 - 40
Relative Humidity (%)	10 – 80	10 – 80	10 - 80
Cooling Method	Water Cooled	Water Cooled	Water cooled
Water-cooling Temperature (°C)	25 ± 1	25 ± 1	25±1
Water-cooling Flow (L/min)	> 20 (Laser), 1.5 – 2.5 (QBH)	> 20 (Laser), 1.5 – 2.5 (QBH)	>30 (laser),1.5-2.5 (QBH)
Water-cooling Pressure (Bar)	3 – 5	3 – 5	3 - 5
Joint Diameter (mm)	12	12	16
Dimensions(W×D×H)(mm)(including handle)	482 × 450 × 105	482 × 450 × 105	482x575x133
Weight (kg)	25 ± 3	30 ± 3	50±3



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FFRC-15H-A

Optical characteristics	
Model	FFRC-15H-A
Operating mode	CW/modulated
Polarization	Random
Output power tunability (%)	10 - 100
Beam quality (m ²)	1.3
Output power instability at 25°C (%)	< ±2.5
Central wavelength (nm)	1080±5
Spectrum width FWHM (nm)	< 6
Modulation frequency (kHz)	5
Red laser power (μ w)	> 200
Output cable parameters	
Output mode	QBH
Output fiber core diameter (μ m)	20
Cable length (m)	10
Bending radius of cable (mm)	200
Electrical characteristics	
Operating voltage (V)	200 – 240VAC,1PH 50/60Hz
Rated power consumption (kW)	4.5
Control mode	AD
Other parameters	
Operating temperature (°C)	0 - 45
Relative humidity (%)	10 - 70
QBH cooling mode	Nitrogen/argon cooling
QBH ventilation flow (L/min)	5 - 10
Dimensions (W*D*H) (mm)	402*432*132
Power supply size (W*D*H) (mm)	130*350*43
Weight (kg)	22±2



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FFRC-1500-E ~FFRC-3000-C

Optical characteristics	Test conditions		
Model	FFRC-1500-E	FFRC-2000-E	FFRC-3000-C
Output power (W)	1500	2000	3000
Operating mode	CW/modulated		
Polarization	Random		
Output power tunability (%)	10 - 100	10 - 100	10 - 100
Beam quality (BPP, mm x mrad)	< 2	< 2	< 2
Output power instability at 25°C (%)	< ±1.5	< ±1.5	< ±1.5
Central wavelength (nm)	1080±5	1080±5	1080±5
Spectrum width FWHM (nm)	< 6	< 6	< 6
Modulation frequency (kHz)	5	5	5
Red laser power (μw)	> 200	> 200	> 200
Output cable parameters			
Output mode	QBH	QBH	QBH
Output fiber core diameter (μm)	50	50	50
Cable length (m)	15	15	20
Bending radius of cable (mm)	200	200	200
Electrical characteristics			
Operating voltage (V)	200 – 240VAC, 1PH 50/60Hz	200–240VAC,1PH 50/60Hz	340-420VAC,3P4W 50/60Hz
Rated power consumption (kW)	5	6	9
Control mode	AD	AD	RS232, AD, Ethernet
Other parameters			
Operating temperature (°C)	10 - 40	10 - 40	10 - 40
Relative humidity (%)	10 - 80	10 - 80	10 - 80
Cooling method	Water cooled		
Water-cooling temperature (°C)	25±1	25±1	25±1
Water-cooling flow (L/min)	>20 (laser) 1.5-2.5 (QBH)	>20 (laser) 1.5-2.5 (QBH)	>30 (laser) 1.5-2.5 (QBH)
Water-cooling pressure (bar)	3 - 5	3 - 5	3 - 5
Joint diameter (mm)	12	12	16
Dimensions (W*D*H) (mm)	482*450*105	482*450*105	482*575*133
(including handle)			
Weight (kg)	25±3	30±3	50±3