HC PHOTONICS CORP.

ICOPO Mixer

- **Cavity enhanced conversion for your selected wavelengths bands (1.4-1.9 micron and 2.4-4.4 micron)**
- **NIR /MIR dual outputs**
- **Choice of broadband (B) or narrowband (S)**
- **Optional free-space output or fiber output**

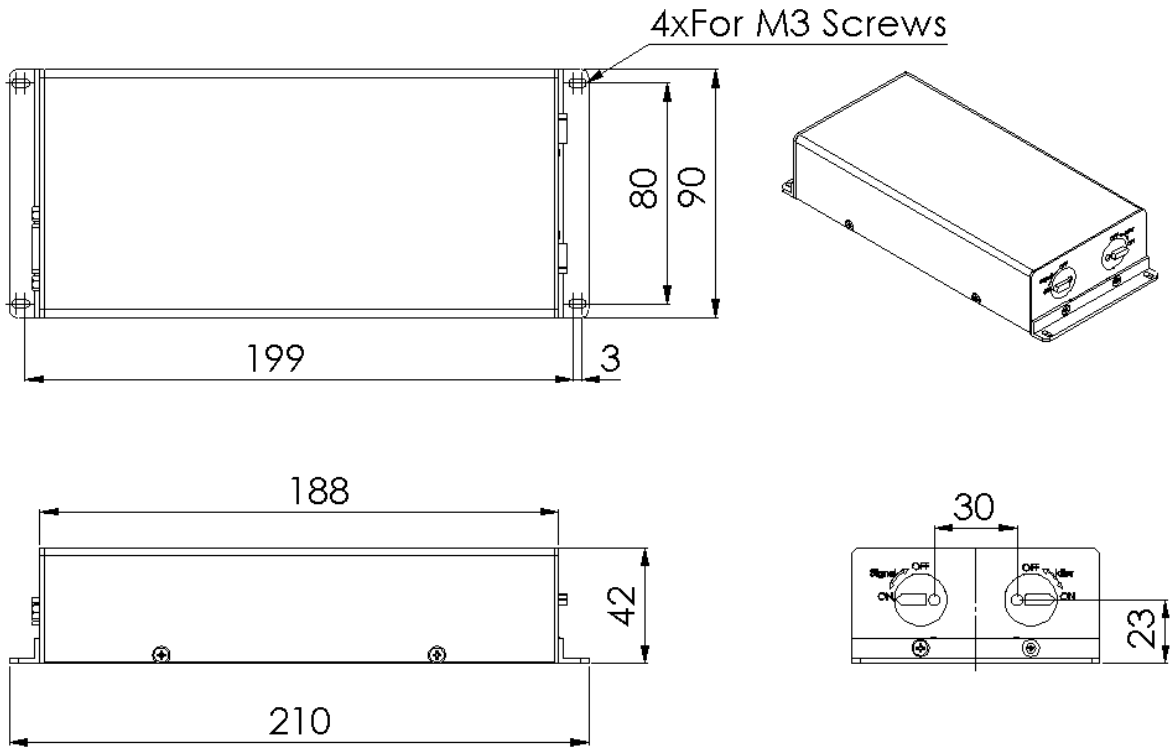
Reference Specification sheet

Optics (General)	unit	Specification			Note
Mixer Type		Intracavity OPO Mixer			
Output Wavelength - Signal	nm	1690			[1], [2]
Output Wavelength - Idler	nm	2870			[1], [2]
Optics (Output)	**unit**	**Minimum**	**Typical**	**Maximum**	**Note**
Output power - Signal	mW	250	300		
Output power - Idler	mW	100	120		
Beam quality, M^2 - Signal			1.1	1.2	
Beam quality, M^2 - Idler			1.2	1.5	
Linewidth	GHz		150	300	[3]
Diameter of collimated output beam	mm	0.8	1	1.2	[4]
Output beam (TEMoo) ellipicity	mm		10	20	
Residual power rejection ratio at different wavelength	dB	40	45		
Output polarization state		linear @ vertical axis			
Output PER	dB	20	25		
Output beam height	mm	22.5	23	23.5	
Output beam angle	mrad	-7.5	0	7.5	
Mechanics	**unit**	**Specification**			**Note**
Housing dimension (L*W*H)	mm	210x90x42			
Electrics	**unit**	**Minimum**	**Typical**	**Maximum**	**Note**
Controller		Customized controller			[5]
Environment	**unit**	**Minimum**	**Typical**	**Maximum**	**Note**
Storage temperature (no humidity)	°C	-20	-	70	
Operating temperature range	°C	10	25	35	
Operating relative humidity (non condensing)	%RH	0	-	85	
Vibration / Shock		Refer to ISTA-2A			
Restriction of hazardous substances directive (RoHs)		Declaration of Conformity to 2011/65/EG			

[1] Different wavelength from 1400~1900 nm to 2400 ~ 4400 nm possible upon request
[2] Can be tuned tens of nm in one mixer
[3] Single longitudinal mode operation possible upon request
[4] Fiber output for the signal port is possible upon request
[5] Customized controller and software for operation

HC Photonics Corp. | hcphotonics.com | service@hcphotonics.com | F4, No. 2, Technology Road V, Hsinchu City 30078, Taiwan

- Mechanical drawing



PHOTONIC SOLUTIONS

Photonic Solutions Ltd Unit 2.2, Quantum Court, Research Avenue South, HWU Research Park, Edinburgh, EH14 4AP, UK, Tel: +44 (0)131 664 8122
Email **sales@photonicsolutions.co.uk** Web **www.photonicsolutions.co.uk**