1x1 Tunable Mixer

Preliminary

- **Plug & play**
- **Continuous wavelength tuning for your selected wavelength bands (e.g. C/L/C+L)**
- **Optional fiber-in/fiber-out (1x1) or fiber-in/free-space-out (1x0)**

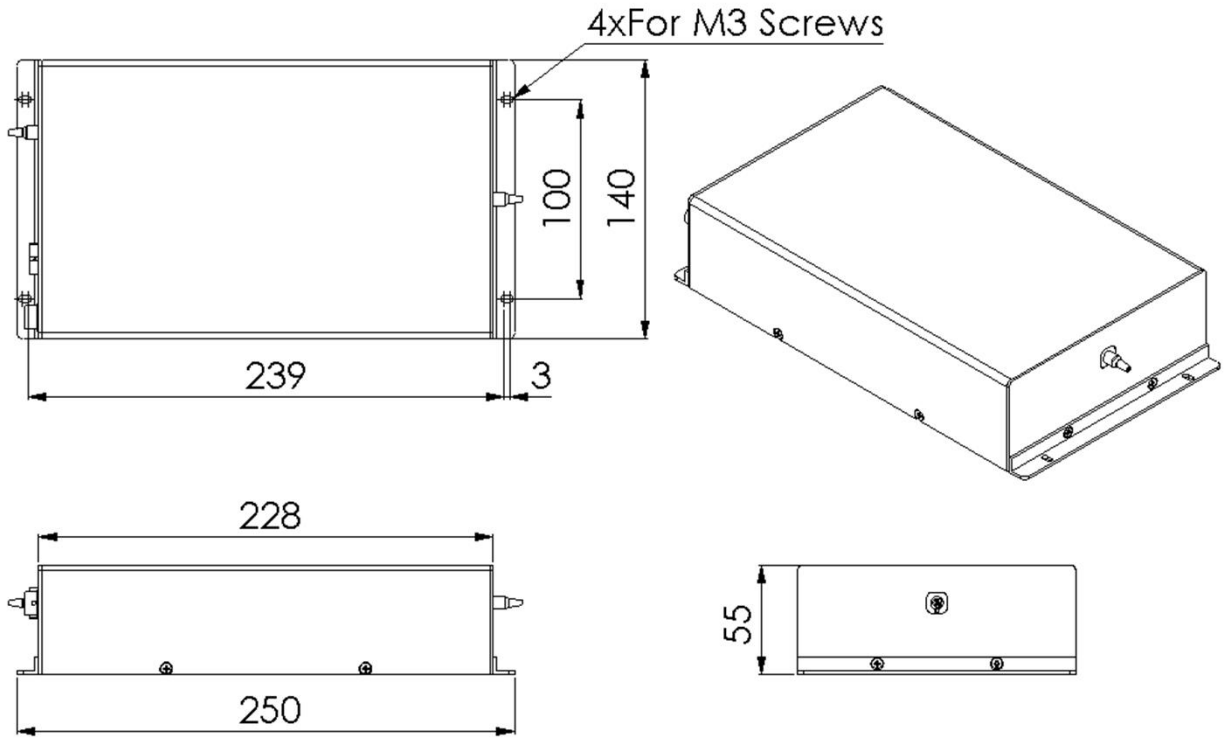
Reference Specification sheet

Optics (General)	unit	Specification			Note
Mixer Type		Tunable Second Harmonic Generation (SHG)			
Mixer Pigtailing Type		1x1			
Input Wavelength	nm	1530 ~ 1590			[1]
Output Wavelength	nm	765 ~ 795			[1]
Input Fiber, Connector		PM1550, None			
Output Fiber, Connector		PM850, None			
Specified pump power	W	13			
Pump condition		CW, Single longitudinal mode			[2]
Optics (output)	**unit**	**Minimum**	**Typical**	**Maximum**	**Note**
Output power @ specified pump	W	1	1.1		
Residual IR/output power rejection ratio	dB	40	45		
Output polarization state		linear @ slow axis			
Output PER	dB	18	20		
Back reflection of IR wavelength	dB		-45	-42	
Mechanics	**unit**	**Specification**			**Note**
Housing dimension (L*W*H)	mm	250x140x55			
Electrics	**unit**	**Minimum**	**Typical**	**Maximum**	**Note**
Electrical connector		Hiroshi HR 10G-10P(73) & RP17-13PA-12PC			[3]
Thermoelectric cooler		8.7V, 4A maximum, Qc = 18 W			
NTC Thermistor resistance@25°C	kΩ	10			
Thermistor B vale (B25/85)	K	3478			
PD response	V/W	0.8	1	1.2	[4]
PD response linearity	%		2	5	[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	

[1] Different wavelength possible upon request
[2] Efficiency will be better for narrow linewidth multimode pump
[3] For temperature control and chip position adjustment
[4] Will be slightly different upon different wavelength
[5] Defined by the range from 20% to full power

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

- Mechanical drawing



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**