6.83um High power benchtop FP-QCL mid-infrared Quantum Cascade Laser 20mW (TDLAS integrated control module)

Product Description

The 6.83um high-power desktop FP-QCL quantum cascade laser is a continuous light laser developed by us. It has a relatively high output optical power and a collimated output power of several hundred milliwatts, which can meet the light source conditions for mid-infrared testing. In addition, the desktop FP-QCL laser module integrates a driver and temperature control module, and can also use software to control the

temperature and operating current of the tuned laser, which can make the laser work stably and maintain the accuracy of the measured values.

Product features

Low power consumption, high power、 High side mode suppression ratio、 Intelligent software control、 Small structure

Part Number

MP-QCL-6830-FP-20-T

Application area

Mid-infrared test light source、 Mid-infrared device analysis、 Mid-infrared system light source

Core parameters

Central wavelength	Output Power
6830nm	20mW

General Parameters

Technical Parameters:

Parameters	Unit	Technical Parameters		
		Min	Typ	Max
		6.83umFP-QCL		

Parameters	Unit	Technical Parameters		
		Min	Typ	Max
		6.83umFP-QCL		
Collimated laser output power	mW	10	20	
Peak operating wavelength	um		6.83	
Spectral width (FWHM)	nm		3	
Output side mode suppression ratio (SMSR)	dB	30		
Output isolation	dB		30	
Wavelength temperature coefficient	nm/℃		0.6	
Wavelength current coefficient	nm/mA		0.2	
Output power stability (8 hours)	%		±1	±4
Output power adjustable range	%	0		100
TEC operating range	℃	0		50
Operating voltage	VAC	100	220	240
Operating temperature	℃	0		55
Storage temperature	℃	-20		65
Specifications and dimensions	mm	343(L)×193(W)×180(H) Benchtop		

Technical indicators:

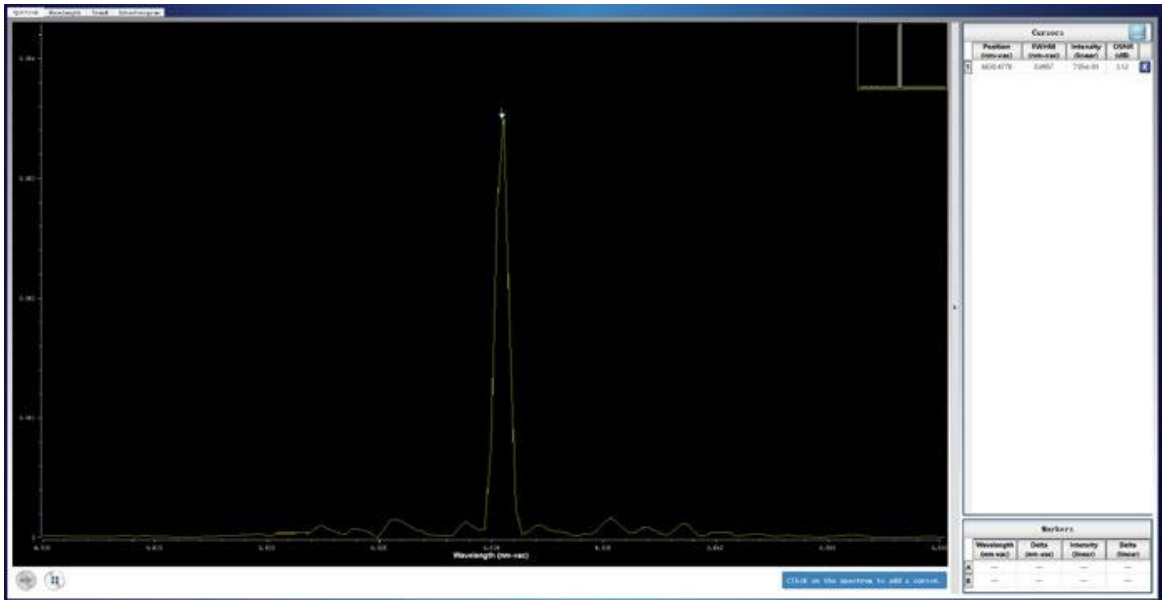
1. Output power is optional;

2. Peak operating wavelength is optional;

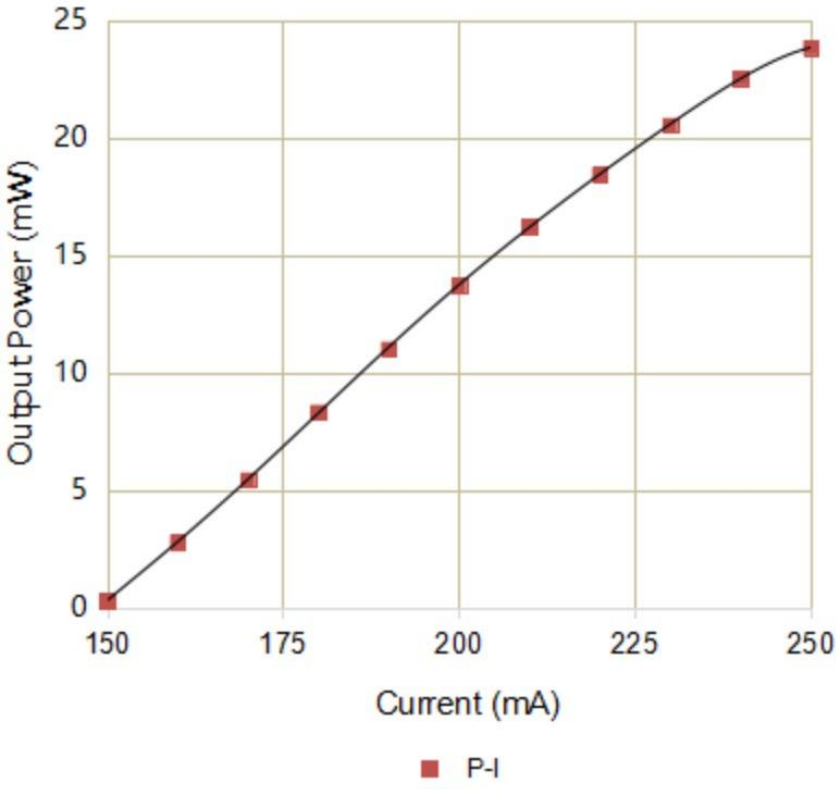
3. Output power stability test condition is 25 degrees, after 30 minutes of preheating;

4. Maximum power consumption refers to the overall power consumption under extreme working conditions.

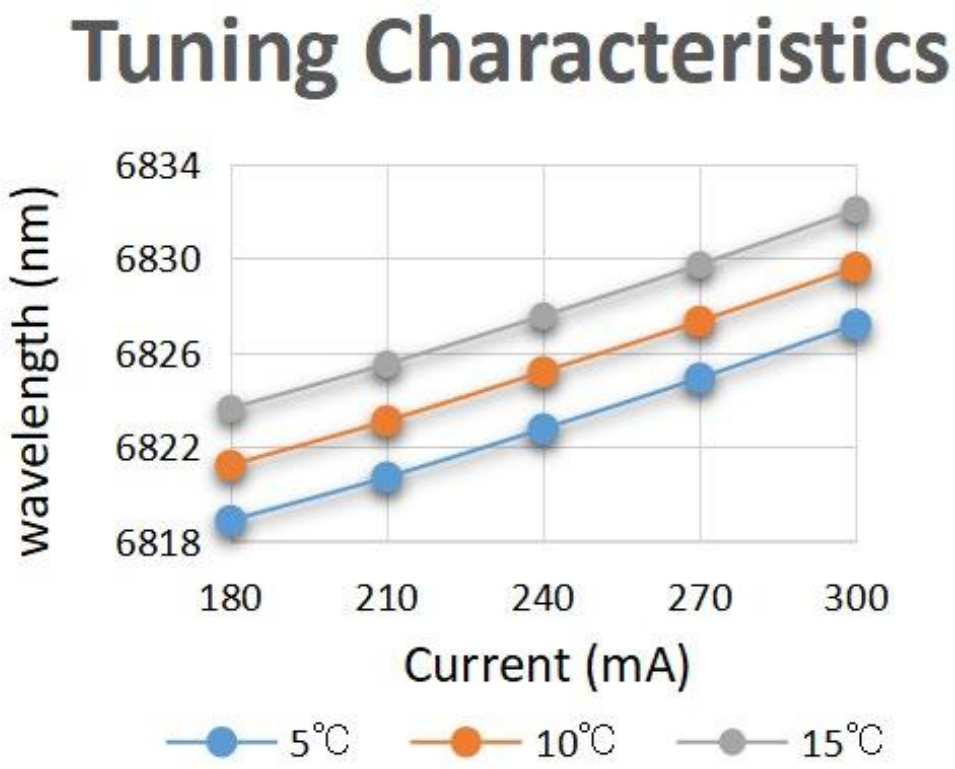
1. Spectrum（15℃、280mA）：



2. Power curve (5℃):



3. Wavelength temperature current tuning curve:



Order Info:

MP-MIR-QCL- W□□□□ -☆-△-XX

W□□□□: Wavelength

4000:4000nm

4600:4600nm

6300:6300nm

6830:6830nm

9000:9000nm

☆ : Collimated output

1: with

0: without

△: Laser Type

FP:QCL-FP

DFB:QCL-DFB

XX: Output Power

001=1mw

020=20mw

250=250mw

400=400mw

1000=1000mw