

Date:14-08-2024

CORRIGENDUM-1

Tender Ref No	IITH/MAE/CPRAKASHJ/2024/G/T030
Tender ID	2024_IITH_820778_1
Name of Tender	Nd YAG Laser with Accessories
Reason of Corrigendum	Addition Technical Specifications

Addition Technical Specifications

Pulsed Laser

DPSS Nd: YAG Q-switched laser
Wavelength: 1064nm
Pulse Energy at 1064nm: more than 50mJ
Pulse Repetition Rate: Upto 20Hz
Pulse Duration: 6-10 ns
Beam Divergence, mrad: $\leq 3,0$ mrad
Polarization: Linear
Motorized attenuator
System control from external PC via USB interface Software.
Software should be included
Future Upgrade Option: Possibility of further addition of SHG module (532nm output)

Accessories:

a. Energy Sensor

Spectral Range: 400-2000
Minimum Pulse Energy: 200 μ J
Maximum Pulse Energy: 10 J
Maximum Frequency: 250 Hz
Maximum Average Power: 25 W
Maximum Average Power Density: 200 W/cm²
Maximum Pulse Width: 20 ms
Damage Threshold (2 ms): 60 J/cm²
Diffuser: Yes

b. PC Based USB Energy Meter Interface

Thermal Sensor Compatibility: Yes
Photodiode Sensor Compatibility: Yes
Pyroelectric Sensor Compatibility: Yes
Beam Track Sensor Compatibility: Yes
Power log period: 1seconds to Unlimited
Data Transfer Rate: 10,000 Hz
Timing: resolution 1 μ s

c. Software

Plug & Play Energy & Power Measurement software

d. Laser Safety Goggle

Visible Light Transmission: 26%
OD 7+ @ 190-534 nm
OD 5+ @ 850-1,100 nm
OD 7+ @ 1,064 nm

e. Optical Beam Splitter Element

Element Type: Window
Material: Fused Silica
Size [mm]: 25.4
Aperture [mm]: 22
Thickness [mm]: 3
Coating: AR/AR coating
Wavelength [nm]: 532nm
Beam Mode (SM/MM): SM or MM
Number of Spots: 10 Separation
Transmission efficiency: Close to 100%

f. Mounting Assembly

- a. Kinematic Mount
 - Optics Size: 25mm
 - Optics thickness: 6mm
- b. Optical Post assembly for mounting on Optical table
 - 12mm Optical post with suitable mounting setscrew for mounting kinematic mount
 - Pedestal Post Holder
 - Pedestal Fork with suitable pedestal adapter to a breadboard or optical table.