

Telephone: **044-22574416**

Extn:

Department of Electrical Engineering
Indian Institute of Technology, Madras
 I.I.T.P.O., MADRAS – 600 036.

Ref. No.

ELE	BIJO	2019	System of 8 Channel DWDM Laser Sources
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Date: 26.09.2019

Due Date: 17.10.2019

Under Certificate of posting

To:

Dear Sirs,

1. Quotations are invited in duplicate for the various items shown below/overleaf/enclosed list.
2. The Quotations duly sealed and superscribed on the envelope with the reference no. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for sixty days from the due date and period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate Contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable.
6. Local Firms: Quotations should be for free delivery to this Institute. If Quotations are for Ex-Godown, delivery charges should be indicated separately.
7. Firms outside Chennai: Quotations should be F.O.R Chennai. If F.O.R consignor station, freight charge by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of Sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have Concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a commission Sales Tax certificates will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

Specification enclosed and quotation to be sent to the below address:

*Dr. Bijoy Krishna Das
 Professor,
 Department of Electrical Engineering,
 Indian Institute of Technology, Madras,
 Chennai – 600 036.*

Yours faithfully,


 HEAD / Project Co-Ordinator

System of 8 Channel DWDM Laser Sources

a) DWDM DFB Laser Diode Modules

Technical Specifications	
WAVELENGTH	
Wavelength option	1546.92 nm, 1547.72 nm, 1548.51 nm, 1549.32 nm, 1550.12 nm, 1550.92 nm, 1551.72 nm and 1552.52 nm (8 Channels of 100 GHz ITU Grid)
Tuning range	+/- 0.85 nm
Accuracy	+/- 0.025 nm, typ. \leq 0.01 nm
Stability	< 0.002 nm over 24 hours
Resolution	\leq 1 pm
Laser Linewidth	< 10 MHz
OUTPUT POWER	
Optical Power	\geq 20mW
Accuracy (Abs/Rel)	0.6 dB/0.4 dB
Stability	< 0.005 dB over 15mins
Attenuation	continuously variable up to 10 dB
Resolution	0.01 dB
Side mode suppression ratio	> 36 dB @ max. power
Relative Intensity noise	-145 dB/Hz (Typical)
Optical Isolation	\geq 35 dB
COHERENCE CONTROL	
Linewidth	up to 1 GHz (Adjustable)
Shape	Noise, sine & square (Triangle upon request)
Bandwidth (Noise)	~ 0.2 to 5 kHz
Frequency (Sine, Square)	0.02 to up to 50 kHz
Modulation Depth (Noise)	0.1 to 10%
Modulation Depth (Sine, Square)	0.1 to 100%
MODULATION	
ON/OFF Modulation	0.02 to up to 50 kHz
Synchronous TTL	0 to 10 kHz (all lasers within mainframe simultaneously via common BNC input)
Analog LF modulation	DC to 50 kHz (option, via SMA input at the module)
GENERAL DATA	
Chassis	8 Slot Rack Mountable
Optical output (standard)	FC/APC
Fiber	SMF
Operating Temperature	0 to 35 °C (non-condensing)
Interface software	LabView

b) Modular Test & Measurement Platforms

TECHNICAL SPECIFICATION	
Mains Supply	220 V (\pm 10%) Fixed (50 to 60 Hz)
Maximum Power Consumption	800 VA
Relative Humidity	Max. 80%
Warm-Up Time for Maximum Accuracy	< 15 min

BKS
 23/09/2019

विजय कृष्ण दत्त / Bijoy Krishna Das
 सह-प्राध्यापक / Associate Professor
 विद्युत इंजीनियरिंग विभाग
 Department of Electrical Engineering
 भारतीय प्रौद्योगिकी संस्थान मद्रास
 INDIAN INSTITUTE OF TECHNOLOGY MADRAS
 चेन्नई / Chennai - 600 036 भारत / India