### Indian Institute of Technology Kanpur

### **Department of Aerospace Engineering**

Enquiry Number: IITK/AE/GMK/17-18/01

Dated: 30-10-2017

Sub.: Inquiry for the supply of: "FIBER BRAGG GRATING SENSORS"

Enquiry date: November 1, 2017 at 10:00 AM

Extended Closing date: November 25, 2017 at 5:00 PM

Sealed quotes (technical bid and price bid separately sealed) are invited for the above mentioned laboratory products as per the specifications given in the next page.

Your quote should mention/include the following:

- Maximum discount if any should be offered and mentioned.
- Quoted price should include the cost for installation, warranty, required accessories and softwares.
- Validity of the quote at least for 90 days.

• FOB (indicating port of shipment) and CIF (New Delhi) values should be quoted separately if import is required. For quotes in INR, the price quote should be for delivery at Kanpur.

• The quote should cover insurance for transport up to Kanpur.

• Indian agency commission if applicable (should be certified by the principal if no agency commission is applicable) in case of import.

- Authorization certificate from the principal if you are a local agent.
- Terms and conditions for the payment, including the banker's name of the principal and the account number, if any, for electronic transfer.
- Include proprietary item certificate if applicable.
- Technical literature to support your product (in technical bid).
- Users' list with contact address in technical bid.

<u>Note: Only principal manufacturers or authorized representatives are requested to send the quote</u> <u>along with proper certificates. The envelope should be marked as "Quote for FIBER BRAGG GRATING</u> <u>SENSORS</u>"

Kindly send sealed quotations to the address given below.

Dr. G. M. Kamath

#### **Department of Aerospace Engineering**

Indian Institute of Technology Kanpur,

Kanpur 208016 (UP), INDIA

#### FIBER BRAGG GRATING SENSORS

### Quantity

		Terminal/	
Packaging details	Wavelength	Inline	Quantity
	1540	Т	2
	1550	Т	2
Integrated with unimpregnated fiber/cloth material (i)	1560	Ι	2
	1540	Т	2
	1550	_	2
Integrated with fiber reinforced polymeric material (ii)	1560	Т	2
	1540		2
	1550	Т	2
Without packaging (iii)	1560	Т	2

# **Technical Specifications**

FBG Length	5 mm or below
Fiber Coating	Polyimide
Connectors	FC/APC
Fiber Type	Single Mode
Cable Length	Above 1m
Operating Temperature	-20 to 50 C
	50-75 mm (length)
Packaging Dimensions (for i & ii)	20 +/- 5 mm (width)
	minimum thickness

# Fiber Bragg Grating (FBG) INTERROGATION SYSTEM (High Frequency)

Quantity: 01

1	Minimum no. of Channels	4
2	Sampling Frequency	At least 500 kHz
3	Wavelength	Should be able to sense 1530,1540,1550,1560 nm
4	Wavelength Resolution	0.01 pm
5	Optical Connectors	FC/APC
6	Computer Interface	USB/ Ethernet
7	Software compatibility	Must be compatible with Labview

# **Technical Specifications**

# Fiber Bragg Grating (FBG) INTERROGATION SYSTEM (Low Frequency) Quantity: 01

# **Technical Specifications**

1	Minimum no. of Channels	2
2	Sampling Frequency	At least 250 Hz
3	Wavelength	Should be able to sense at least two of 1530,1540,1550,1560 nm
4	Repeatability	< 1 pm
5	Optical Connectors	FC/APC
6	Computer Interface	USB/ Ethernet
7	Software compatibility	Must be compatible with Labview