

## **DATA LOGGER AND HEAT FLUX METER SYSTEM**

Supply, Installation, commissioning and integration of the Data Logger and Heat flux meters for logging the Radiative heat flux, Temperature and Velocities data in PC(PC is in CBRI Scope) with respect to time at different locations in the fire experiments to be conducted in experimental fire building as per specifications given below.

### **Technical Specifications**

<b>SL. No</b>	<b>Parameter</b>	<b>Specifications</b>
<b>Data logger - 01 No with necessary CEM accessories.</b>		
1.	No of channels	110 or more
2.	Sampling speed	1 s or less
3.	Operating Temperature range	0 to 70 ° C
4.	Data Communication	USB, ETHERNET, RS232 and Modbus.
5.	Software compatibility	Compatible to Windows Software
6.	Display	LCD
7.	Memory/Storage	128 MB or more
8.	Resolution	18 bit or more
9.	Channel expansion	upgrading up to 200 or more
10.	Channel feature	Dual channel
11.	Isolation voltage	100 V or more
12.	Digital Channels	8 or more
13.	Common mode rejection	90db or more
<b>Heat Flux meter – 02 No with necessary accessories</b>		
14.	Range	0 - 50 kW/m <sup>2</sup> or more
15.	Sensor technology	Gardon/Schmidt-Boelter
16.	Cooling	Water flow cooling
17.	Response time	≤ 250 x 10 <sup>-3</sup> s or better
18.	View angle	150° or more

### **Terms and conditions**

1. Installation, demonstration, commissioning and technical training of all the instruments (Installation of the heat flux sensors on wall and floor with necessary accessories) along with insulated wiring connecting the sensors to data logging device placed in data logger room (distance is 15 m) should be done by the supplier at experimental facility site CBRI, Roorkee.
2. Installation related fabrication, civil and electrical works are in bidder scope.
3. IP box should be provided for complete system.
4. The following document should be provided
  - I. Instruction manual for operation both soft and hard copy
  - II. Instruction manual for software
  - III. Proper calibration certificates for the instruments
5. One year warranty for the system from the date of installation and successful commissioning