



## INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

### MATERIALS MANAGEMENT DIVISION

Powai, Mumbai - 400076

### Environmental Test Chamber

#### Technical Specifications:

The bench top and Humidity test chamber should have the following specifications :

1. Capacity of Test space: Maximum 34 liters
2. Interior material: Corrosion resistive stainless steel
3. Dimensions: Compact and can be kept as bench top
4. Required Temperature range:  $-40^{\circ}\text{C}$  to  $+180^{\circ}\text{C}$
5. Required Humidity range: 10-98% R.H.
6. Humidity deviation in time: max.  $\pm 3\%$  R.H.
7. Temperature deviation in time:  $\pm 0.3$  to  $\pm 0.5$  deg. C
8. Temperature ramp up rate: ca. 3-5 deg. C/min
9. Temperature ramp down rate: ca. 3-5 deg. C/min
10. PLC and/or PC controlled temperature and humidity indicator controller
11. The water tank must be built in for continuous operation
12. Leakage breaker for power supply must be provided to prevent damage to specimens.
13. Proper safety devices are mandatory for protection of the instrument
14. Both manual and programmable modes should be present with preferably touch panel display
15. Communication function: Both USB, Ethernet to be provided
16. Laptop (with state of the art configuration) along with data logging software must be provided for facilitating the monitoring of temperature & humidity chamber
17. Viewing window with interior light must be provided for sample monitoring.
18. A port should be provided on the side panel preferably with 6 numbers of electrical feed-through.
19. AMC for three years to be included (Free of cost).