

1. IoT enabled Weather station

IoT enabled Weather station		
	The system should be built around a sustainable and well accepted industrial grade Processor-cum-Gateway (Rasbery Pi or ARM based microcontroller).	
	Vendor should provide a secure portal and a Mobile App or Mobile GUI to monitor the data provided by the end points.	
	Weather station able to measure following parameters	
1	Barometric Pressure	
2	Outside Temperature	-40°C to 60°C with $\pm 1^\circ\text{C}$ accuracy and 0.1°C resolution
3	Outside Humidity	10 – 99% range and 1% resolution
4	Altitude	
5	Inside room Temperature (up to 8 locations!)	-40°C to 60°C with $\pm 1^\circ\text{C}$ accuracy and 0.1°C resolution
6	Inside Humidity (up to 8 locations)	10 – 99% range and 1% resolution
7	Sunlight	0 to 200 k Lux
8	UV Index	1 – 15+ with ± 1 accuracy
9	Wind Speed	0 – 50 m/s with 3 m/s accuracy and 0.1 m/s resolution
10	Wind Gusts	
11	Wind Direction	
12	CO and Co2 gases	
13	Rain	
	Wireless frequency for data transmission 433 MHz 100 m line of sight Or WiFi / LoRa enabled	
	Temperature and Humidity data update interval up to 60 seconds Other sensor's' data update interval up to 20 seconds	
	Working Manual of the system will be provided by the vendor. The system should be scalable, so that more sensors (Air quality Index, Solar Power Index) can be added at a later stage if required.	

