FBXYF1DL: YellowFox1 Dust air quality monitor data logger
Technical specification

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Model: FBXYF1DL dust quality air monitor

Air monitor to check particulate matter PM1.0 / PM2.5 / PM10

Features:
- Measuring range: 10 – 1000 µg/m^3
- Accuracy: ±5% for values below 400µg/m^3
- Resolution: ~ 15 µg/m^3
- Long term stability: ±0.5 %rH
- Operating temperature: 0°C to +50°C
- Operating humidity: 0 to 60 %rH (relative humidity)
- PM1.0 / PM2.5 / PM10 display values in round robin fashion

Air Quality values	Description
GOOD Value < 600 µg/m^3	Breathing air quality is healthy
NORMAL 100 µg/m^3 < value < 200 µg/m^3	Air purifier is preferable; might cause breathing troubles like coughing, sneezing if exposed for a prolonged duration
POOR 200 µg/m^3 < value < 400 µg/m^3	Not good for health. Will cause health hazard if continuously exposed under these breathing conditions
ALARM value > 400 µg/m^3	to breathe even for more than 10-15 minutes. Recommend to turn off the monitor in such cases

- **4 indicators for air quality index (BLUE / GREEN / YELLOW / RED)**
- **ALARM sound when readings are very high in alarm condition**
- **Operating voltage: 12 volt DC (FBXYF3T monitor comes with an adapter 110-220VAC to 12VDC)**

- Apparatus is designed for indoor use only

- **The gas needs to reach the sensing *point* (through the air inlet cavity holes) , for the machine to detect the VOC concentration**

- When not in use, keep the machine in turn OFF position

- **Do not expose the unit to high concentration of VOC for prolonged duration. If the measurement reaches ALARM condition, then it is recommended to turn off the unit after noting the readings and place this apparatus at a relatively clean location**

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SD card

Air quality dust monitor data logger console

Features:
- Wireless data logger receiver
- 24×7 data logging capability
- Wi-Fi data download
- SD Card data download 2/4/8/16GB information
- New file created on daily basis
- Readings with a variation of more that ±10µg/m^3 is recorded on the SD card

Log file details:
- .txt log file
- Every day as a new folder to store the logfile
- A new data is stored in the SD-card when the difference from the previous value is ±10µg/m^3
- Dust monitor readings are in range 10 – 1000 µg/m^3
- Log file contains present time, PM1.0/PM2.5/PM10.0 dust concentration in µg/m^3 and percentage of pollution (1000 µg/m^3 reading marks 99%, while 0 µg/m^3 marks 0%)

How to operate:
- To run the apparatus, connect the 12volt adapter power supply to the device and connect the other end of the adapter to 110-220vac socket point
- Wait for initial boot time of 10-30 seconds (boot time varies with firmware versions)
- Ignore the first few readings, because they may stand inaccurate. Consecutive readings can be noticed / recorded. Though the data logging and recording facility starts, immediately after power is turned ON

Dimensions:
Receiver console size: 240 x 165 x 45 mm
Weight: 450-580 gms

Step to download files:
- Connect to WiFi network: FBX_DATALOGGER
- Password: request from the sales team at the time of purchase
- On the web browser type http://192.168.1.1 on the url
- Once connected to the data logger machine, browse to the "log files" link to download the files
  (a file for every day would be present, from the time SD card is inserted)

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[DATALOGGER v1.0]

System Time link
SD Card Info: link
Log Files: link

Browser Time: **13/03/19** **12:27:50**

RTC Time: **13/06/19** **27:36**

Update RTC Time: Update

Sd Card: present

Volume type: FAT32

Volume size: 3802Mb

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[DATALOGGER v1.0]

13-6-19.TXT [6617]

Logged files on date

```
12:38:49 ****** MONITOR REBOOT ******
12:39:21 PM 2.5 reading -->  :10 ug/m3
12:39:21 PM10.0 reading -->  :14 ug/m3
12:39:21 --------------------------------
12:39:52 PM 1.0 reading -->  :12 ug/m3
12:39:52 PM 2.5 reading -->  :16 ug/m3
12:39:52 PM10.0 reading -->  :18 ug/m3
12:39:52 --------------------------------
12:40:23 PM 1.0 reading -->  :13 ug/m3
12:40:24 PM 2.5 reading -->  :17 ug/m3
12:40:24 PM10.0 reading -->  :19 ug/m3
12:40:24 --------------------------------
12:40:55 PM 1.0 reading -->  :13 ug/m3
12:40:55 PM 2.5 reading -->  :16 ug/m3
12:40:55 PM10.0 reading -->  :17 ug/m3
12:40:55 --------------------------------
12:41:26 PM 1.0 reading -->  :10 ug/m3
12:41:26 PM 2.5 reading -->  :13 ug/m3
12:41:26 PM10.0 reading -->  :14 ug/m3
12:41:27 --------------------------------
```

Logged files on time