Online SPM Analyzer
USER MANUAL
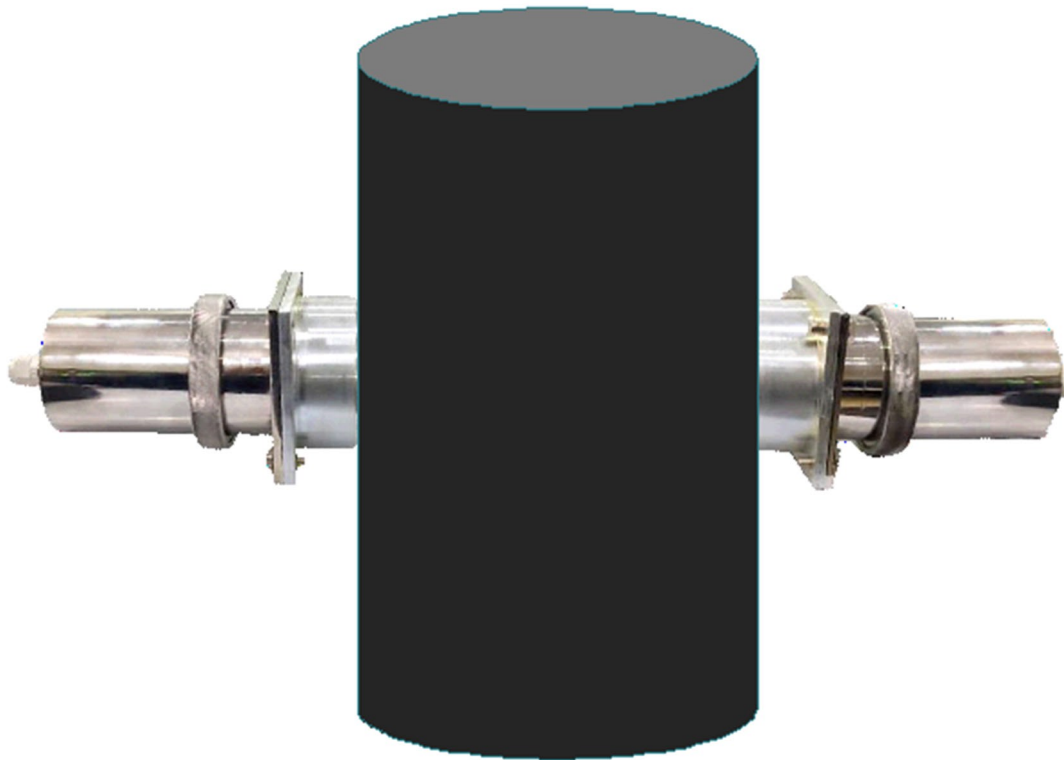
E&E

INTRODUCTION

The Online SPM Analyzer is a measuring device for dust at low to high concentrations. Basic measuring value is transmittance. Opacity and extinction that can be calculated and displayed as well as the dust concentration after gravimetric calibration. The device has an integrated contamination check.

FEATURES

1. On-line Continuous monitoring of SPM for various emission sources.

2. Combined techniques, adaptive stabilization, dynamic adaptive phase-lock amplification

3. Very low zero drift, long inter calibration duration.

4. Compact, easy to install, anti-lightning, high adaptability, low cost and less maintenance.

5. E&E based design and development of cloud server connectivity modem.

FIELDS OF APPLICATION

• Emission monitoring of power stations and waste incineration plants.
• Monitoring of filter plants.
• Monitoring of dust loads in factory workshops.
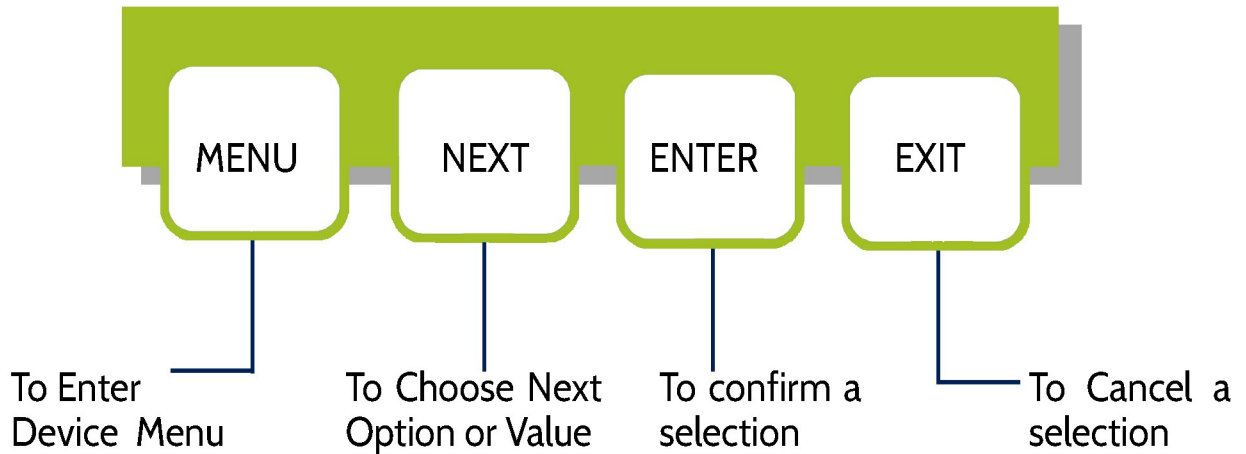• Process control of ventilation plants and exhaust systems.

TECHNICAL SPECIFICATION

TYPE	SPECIFICATION
Measurement principles	Transmittance measurement
Measuring ranges	Extinction: 0- 0.1 | 0 - 2 Opacity: 0 - 20% | 0 - 100 % Relative opacity: 0 - 20 % | 0-100 % Dust concentration: 0- 200 mg/m³ | 0- 10,000 mg/m³ Transmittance: 100- 80 % | 100- 0 %
Process temperature	-40°C - +600 °C
Performance test measured	Dust concentration
Process pressure	With external purge air unit :50 - 30 hPa With control unit MCU-P :50 - 2 hPa
Duct Material	Non Condensing
Duct diameter	0.5 m -2.5 m | 2 m- 5 m | 4 m-12 m
Electrical safety	CE
Operating Humidity	100
Gas Temperature	+600 °C

OPERATION-FUNCTIONALITY

This section walks you through the step-by-step standard operational procedures on how to use the monitor/data logger.
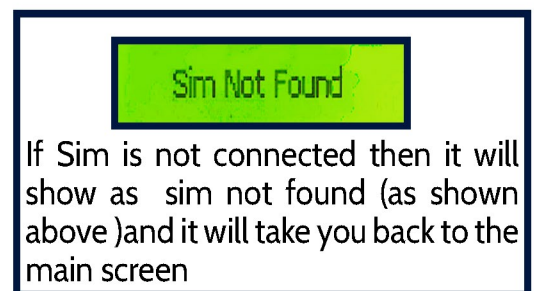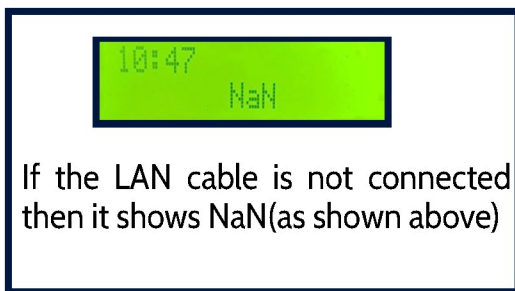
MENU	NEXT	ENTER	EXIT
To Enter Device Menu	To Choose Next Option or Value	To confirm a selection	To Cancel a selection

This is the window which appears as you power on the system.

The machine Name ⟶ Reading of SPM with its unit ⟶ Searching Network ⟶ Sim ProviderName

As Represented below :

If the LAN cable is not connected then it shows NaN(as shown above)

If Sim is not connected then it will show as sim not found (as shown above)and it will take you back to the main screen

Section 3: Menu

When you are on the main screen where it shows you the time and the length of the cable.

Click on the menu button it shows you "Setup", then click NEXT button and it shows you another option of "Copy Data" followed by "Product Info" in the menu option.

```
Menu
> Setup
```
Click
NEXT
```
Menu
> Product Info
```

Section 3.1 : Setup

When you press ENTER key on the setup option of the menu then it opens 3 new options appear; , Zero Calibration, Span Calibration, Set Max SPM, respectively.

1.
```
Setup
> Zero Calib
```
Click
NEXT

2.
```
Setup
> span calib
```
Click
NEXT

3.
```
Setup
> set max SPM
```
Click
NEXT
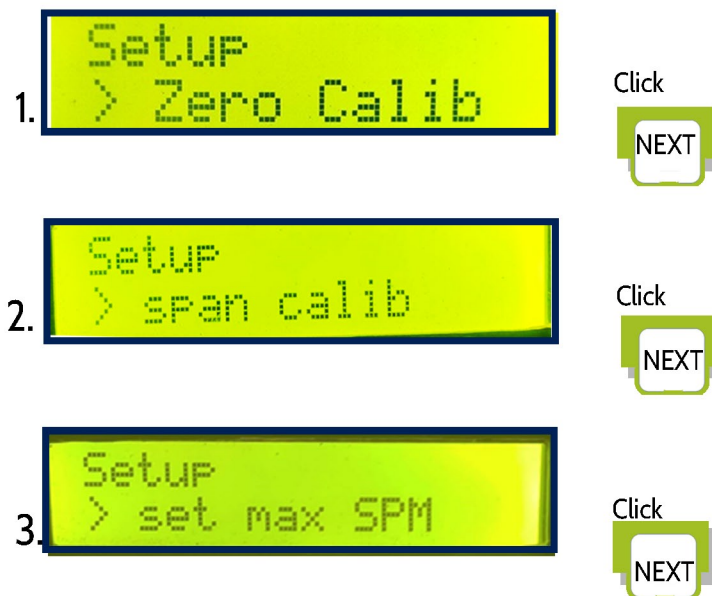
1. ZERO CALIBRATION

For the calibration of SPM, make sure the sensor is connected to the device then bring the sensor close to the stack and Select Menu > Setup > Calibration and Press Enter. The screen will display "Set Zero" Option

```
Setup
> Zero Calib
```

2. SPAN CALIBRATION

Span calibration is done to set the sensitivity of the SPM sensor according to the user convience. The user can select the diffrent values with the NEXT button.
The calibration span covers the difference between your upper range value (URV), the maximum value and lower range value (LRV), the minimum value the device can read.

```
Setup
> span calib
```

Click

ENTER

3. SET MAX SPM

The option is used to setup the maximum value of the SPM reading, and all the other readings are dependent on this value of SPM.

```
Setup
> set max SPM
```

3.3 Product Info

This option details the information about the system in three steps. In first step it will show the unique number of the product and Product ID , In second it will show the wire length and current date , In third it will the show the sim information that is used in the system respectively as shown below

```
Menu
> Product Info
```

Click

NEXT

1.
```
PID : GWR00749
2008001100685
```
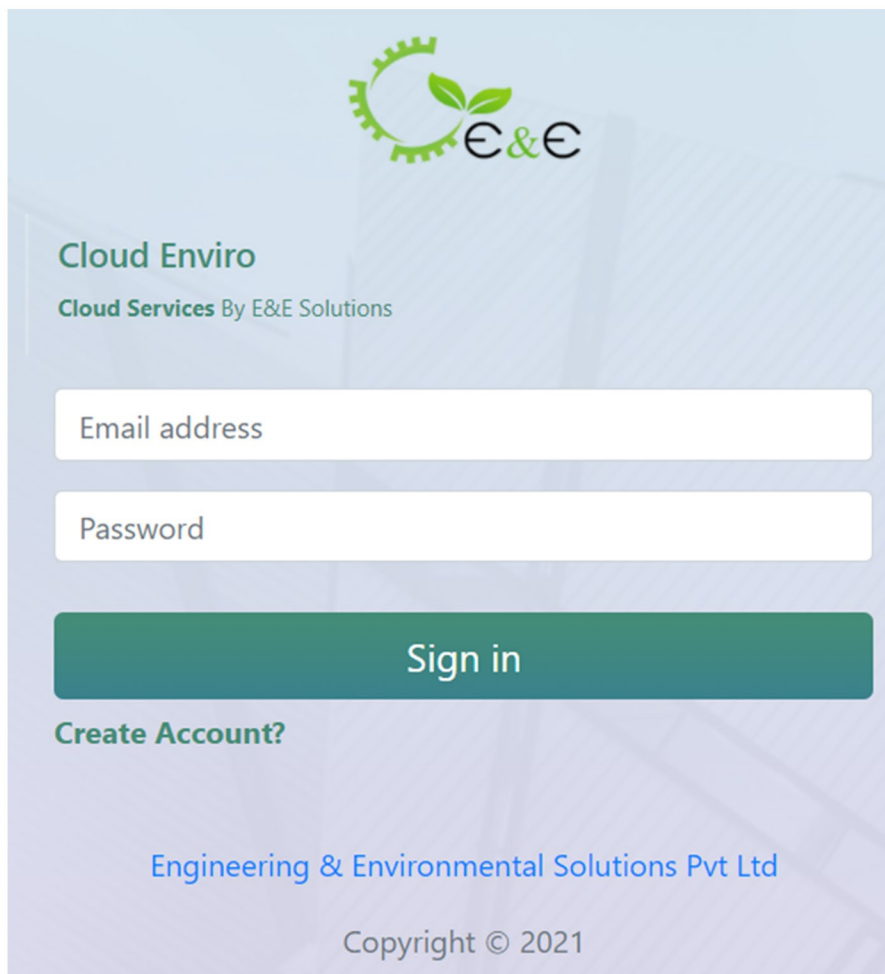
2.
```
WL/LI: 200m/6h
Date : 26/8/20
```

3.
```
SIM : AIRTEL/2
```

Direction to get data on our Cloud

STEP 1: Log on to our website "cloud.enggenv.com" to get data on your server.
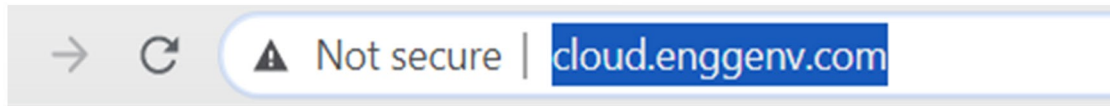
STEP 2 : Enter your email address and password OR Sign Up By selecting " Create Account" and follow the procedures.

STEP 3: After logging in you will find SPM parameters and Real time motoring graph in the DASHBOARD section.

Wide Range of Products

Creating Sustainable Tomorrows

E & E has a wide range of Monitoring Equipment's including
Piezometer | Weather Monitoring Station | Indoor Air Quality Monitor

CONTACT US

Factory Address
Plot No. 733, Near Indane Gas Agency, Village Cherath, Anupshaher Road, Aligarh (U.P) 202001

Registered Office
4/1309, New Sir Syed Nagar, Aligarh, 202001, UP, India

+91 9540990415
+91 7042058885

enggenvsolutions@gmail.com
www.enggenv.com