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Online Water Analyzer

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01 Product Overview

This is a fully integrated, temperature controlled Water quality Analyzer that delivers'near reference'levels of performance in real-time for multiple characteristics of effluent/ water sample and environmental parameters.

Online monitoring of effluents is mandatory for specific category of industries in India. How ever choosing right technology is important, a smonitoring is not a short term job.

The equipment need to berugged, reliable (resultcomparabletolabdata), economical, well supported by manufacturer and local distributor with inventory of spares and skilled manpower. The system shouldn't require recurring cost in reinvestment for replacements at a later stage. Also,the instrument needs to comply Local and International Standards.

02 Product Descriptions

S.NO	TYPE	Details
01	Technology	UV-Visible Spectroscopy
02	Sample Flow	Recommended: 0-5 l/min
03	Parameters & Range	Refer in table below
04	Application	Pharmaceutical, Chemicals,Petrochemicals,Refineries,Industries etc

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03 Parameters to be measured

Continuously measure the concentration of following parameters:

04 Features

- Auto zero done on cleaning solution

  Allows very high level of suspended solid without clogging for all the optical measurements making it suitable for industrial application
- External probes can be added for physiochemical parameters like pH,ORP,chlorine, conductivity and turbidity.
- Its automatic cleaning system and its extremely long life time lamp, the maintenanceis roughly limited to the periodic refill of thein-expensivecleaning solution

Large Storage Capacity

Fully Automated System

GPRS Modem Communications

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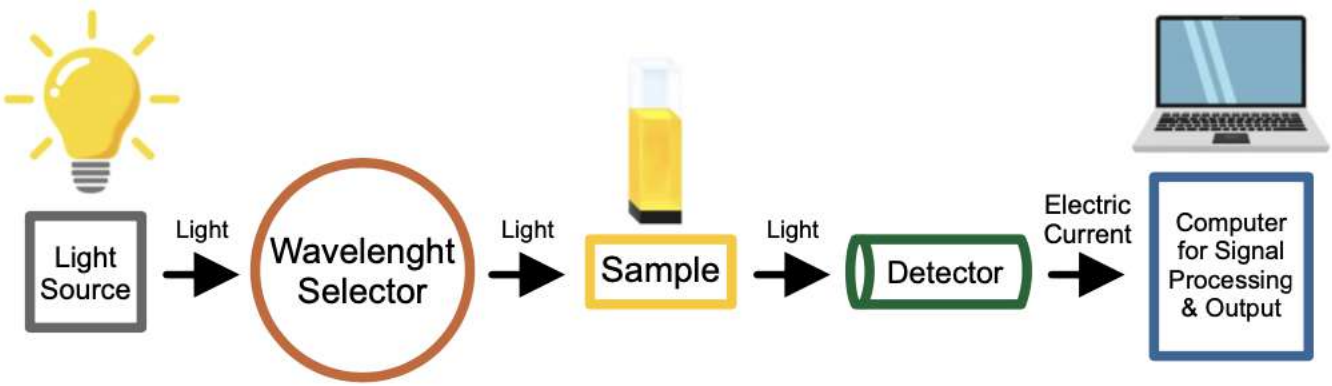
05 Technology used

Monitoring of waste water parameters in a Common Effluent Treatment Plant is a challenging task due to the in take of wastes, having diverse properties & composition, from various industries. Henceitis difficult to set boundary conditions on the measurement. **UV/VIS spectroscopy** is an efficient method for continuous monitoring.

UV-Vis spectroscopy is an analytical technique that measures the amount of discrete wave lengths of UV or visible light that are absorbed by or transmitted through a sample in comparison to a reference or blank sample. This property is influenced by the sample composition, potentially providing information on what is in the sample and at what concentration. Since this spectroscopy technique relies on the use of light, let's first consider the properties of light.

Whilst there are many variations on the UV Vis spectrophotometer, to gain a better understanding of how an UV-Visible spectrophotometer works, let us consider the main components, depited in Figure



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06 Technical Specifications

Sensor	Details
PH Sensor	**Range**:0-14 pH, **Resolution** 0.01pH **Precision**: 0.5 pH,**Response time**: =15s **Operating temperature**: -20degree C to 80 degree C **Operating pressure**:<+10%
OPR Sensor	**Range**: -1000 - +1000 mv, **Resolution**0.1mv, **Precision**: 3%, **Response time**: =15s **Operating temperature**: -10 degree C to 80 degree C, **Operating pressure**:<+10%
Turbidity Sensor	**Range**: 0-1000NTU (default)0-10000 NTU, 0-4000NTU Resolution: 1NTU, 0.1? **Precision**: - 3%, **Responsetime:** =1s, **Operating temperature**: 0degreeto 50 degree C **Operating pressure**:<+ 10%
Electrical Conductivity sensor	**Range**: 0-200 us/cm –Pure water 0-200 us/cm- Drink water 0-2000 us/cm- Tap water, river water 0-20000 us/cm- Sewage detection **Resolution**: 0.001 us/cm- Pure water 0.001 us/cm- Drink water **0**.01 us/cm- Tap water, river water 0.1 us/cm- Sewage detection
Chlorine ions Sensor	**Range**: 0 - 1000 ppm, **Resolution**: 0.1 ppm **Precision**:5% of reading or 10 ppm, **Response time**: =20s, **Operating temperature**: -10 degree C to 80 degree C, **Operating pressure**:<+ 10%
Dissolved Oxygen (DO)	DO Content Range : 0-20 (mg/L) DO % saturation range: 0-200 % **Precision**: - 3%, **Responsetime:** =15s,
Total Dissolved Solids (TDS	Range1: 0-20 g/L **Precision**: - 3%, **Responsetime:** =15s,
Temperature	**Range**: -10 deg C to 150 deg C Lower Detention: 0 deg C **Precision**: - 3%, **Responsetime:** =15s
BOD	**Range**: 0-1000 mg/L **Resolution:** 0.1 mg/L **Response time**: =15s,
COD	**Range**: 0-1000 mg/L **Resolution** 0.1 mg/L **Response time**: =15s,
TSS	**Range**: 0-1000 mg/L **Resolution:** 0.1 mg/L **Response time:** =15s,

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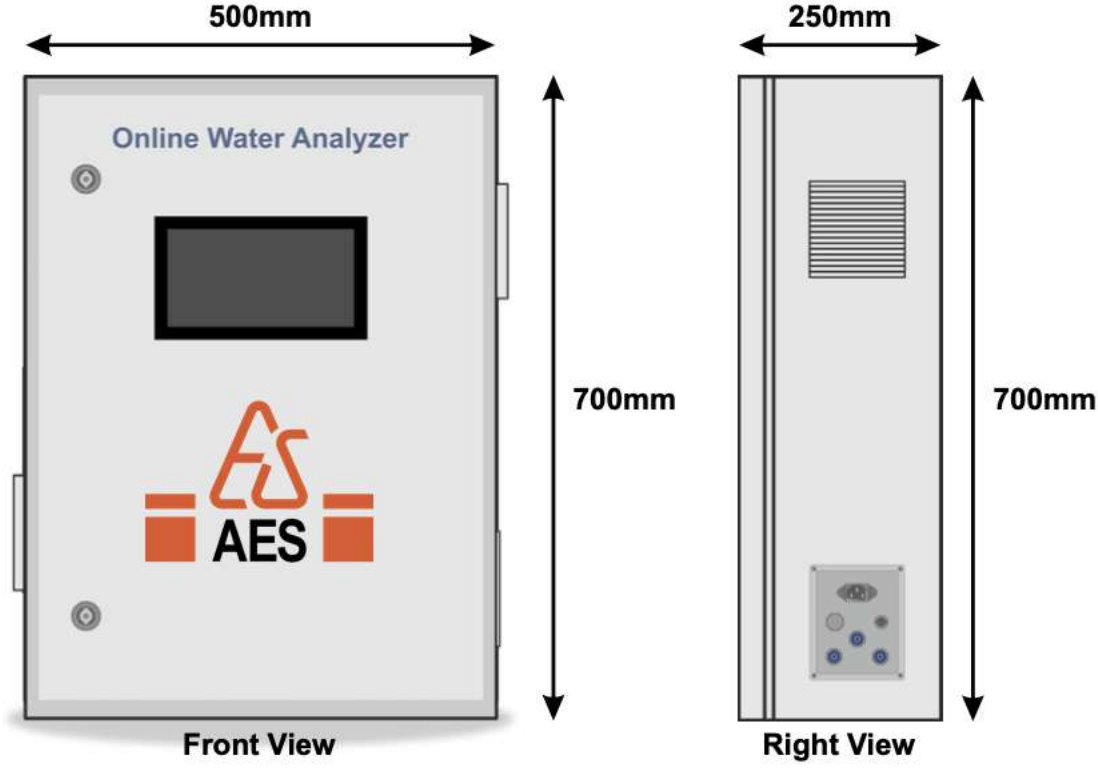
07 Machine Drawing and Unit Dimensions



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08 Areas of Application

- Industrial Wastewater
- Semiconductor Industry
- Refinery Water
- Power Station
- Process Water
- Cooling Tower
- Aquaculture

09 Certified By

- TUV Rheinland, Germany

  Registration No: AK 505481680001

  ReportNo:IN22MOTU 001

  According to: EN 55011:2016+A1+A11+A2

  EN 61000-4-2:2009

  EN 61000-4-2:2012

  EN 61000-4-5:2014+A1

  EN 61000-4-6:2014

  EN 61000-4-8:2010

  EN IEC 61000-4-11/AC

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