Opacity Analyzer
Smoke Density Meter
SDM V9



LKS®

Your Automation Partner

Function & Features

• Continuous Monitoring	• Scanning Distance up to 20 Meter
• Continuously recording in percent (%)	• CE Mark by TUV
• Automatic calculation of Smoke Exceed Limit by Daily & Hourly	• Aid to Efficiency of combustion
• Meet to the department of Environment Emission standard Regulation	

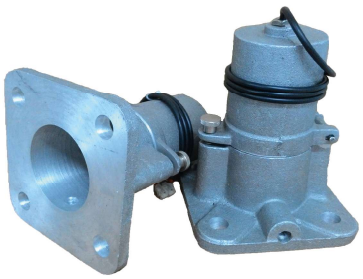
Specification
Control Unit

Model	SDM V9
Screen Width	LCD 70 x 38mm
Power	85-260 VAC; 50/60 Hz
Power Consumption	20 Watt
Ambient Temperature	-10 ~ 50°C
Alarm Contact	Max 5A / 240VAC - SPDT Relay
Measuring Range	0 - 100% (Opacity)
Engineering Unit	Percent Obscuration (%)
Mounting	Panel or Wall
Panel Cut-Out Size	W137 ± 1 x H137 ± 1 x D90 (mm)
Dimension	W150 x H150 x D110 (mm)
Weight	1 Kg
Sampling Time	0.2 seconds
Display Accuracy	±1.0% F.S
Operating Temperature	0°C to 55°C
Operating Humidity	20 to 80% RH Max. (Non-condensing)
Protection	IP65 Front Panel
TUV Certification No.	AE50177232 001
Report No.	17014563 001
Conformity	2004 / 108 / EC
Emission	EN 50270 : 2006 EN61000-3-2 : 2006 EN61000-3-3 : 1955+A1+A2



Sensor

Sender Model	SDS-LK-SV5
Receiver Model	SDR-LK-RV4
Enclosure Class	IP65
Sensor Body Material	Aluminium Alloy
Sender Element	Light Emitting Diode
Flange Mounting Size	146mm P.C.D, Ø18mm Holes, C.T.C: 102mm
Air Pressurized adapter	1/4" BSP Thread
Design Body	Weather proof IP65
Max. Ambient temperature	70°C
Flue Gas Temperature	Max1200°C with Insulation
Swing Door	90°C minimum
Weight	2.0 Kg
Certification	CE Mark by TUV



Auto Cleaner (Applicable for Positive Stack Only)

Model	HP-82S
Ambient Temperature	25°C and 40°C
Power Supply	Single phase 200-240VAC, 50Hz; 3 Phase,345-415VAC, 60Hz
Material	Cast Aluminium
Connection	DN40 BSP
Static Pressure	120m Bar
Capacity	140m³/Hr
Weight	14Kg
Accessories	Hose x 10 meter, Y Joint x 1 & Hose Clip x 6

Application

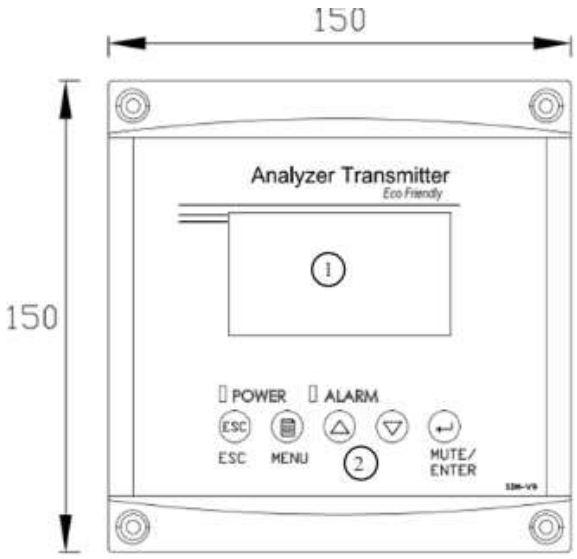
It work for the following system (Eight fulfillment system as follow)

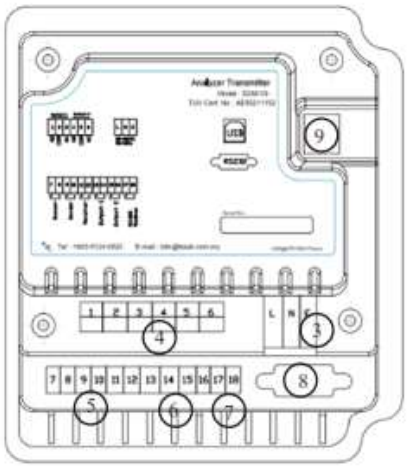
• Solid Fuel Boiler	• Diesel Car Emission
• Gas Fuel Boiler	• Rubbish Incinerator
• Tunnel for Visibility	• Power Plant Boiler
• Generator Emission	• Furnace

Ordering Information

Model	Description
SDMS-LK-V9	Smoke Density Meter Complete Set
SDM-V9	Control Unit
SDS-V5	Sender
SDR-V4	Receiver
HP-82S	Blower

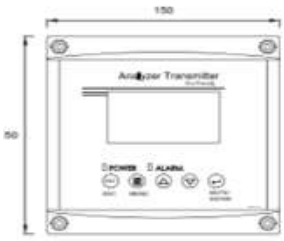
Unit Overview



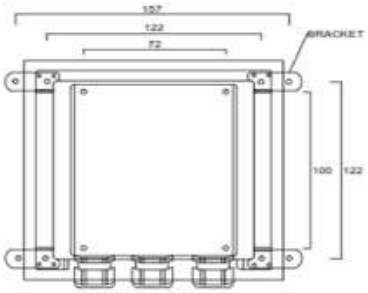


1. LCD display
2. Five Touch Pad Navigation Key
3. Power Supply Terminal (L,N,E)
4. Alarm Terminal (TB1-6)
5. Sensor Input Terminal (TB9-12)
6. Output Terminal 4-20mA(TB13-16)
7. RS485 Modbus (TB17-18)
8. RS232 Terminal
9. USB Interface Port

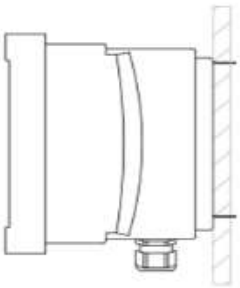
Surface Wall Mounting



Front View

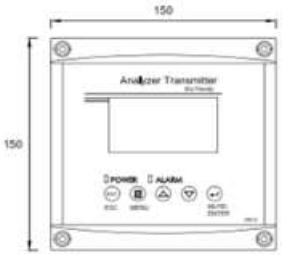


Back View

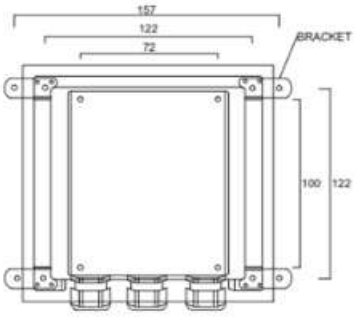


Side View

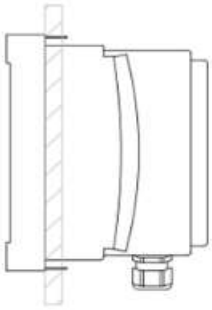
Flush Panel Mounting



Front View



Back View



Side View

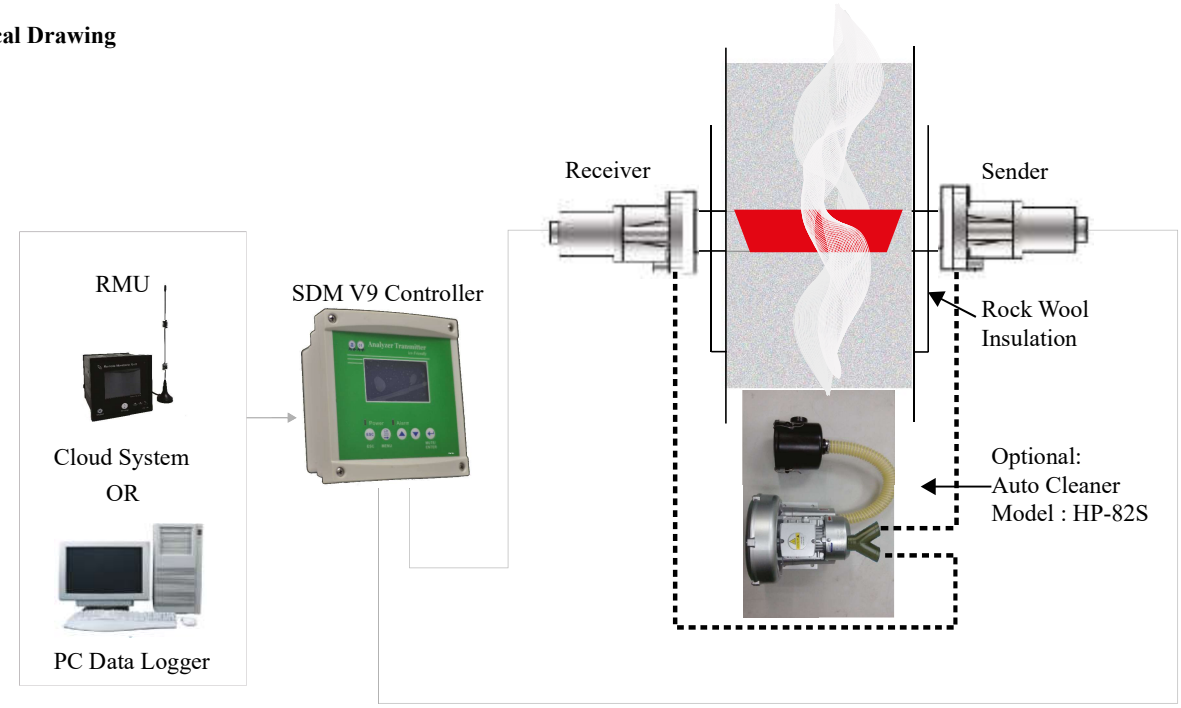
Standard

B.S. 2742M British Standard Miniature Smoke Chart



Chart 0	Chart 1	Chart 2	Chart 3	Chart 4	Chart 5
0%	20%	40%	60%	80%	100%

Typical Drawing



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