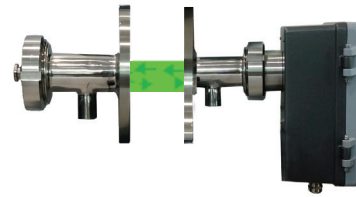


## Measuring Principle

The measuring principle is based on double pass technology which detect the differential of transmit and reflect frequency in pulse with also the reference of measurement. The light beam sender/reflector arrangement, to measure particulate, stack or flue to reflector, which then returns the light to the sender where the intensity of the received light is measure. The light source is a green LED that will have the wavelength of 450nm to 600nm and transmit to the opposite multi angle reflector to reflect back to the sender. The display controller can be install at a maximum of 800 meter away to read and retransmit the data.



ISO-Kinetic sampling data is required for dust concentration reference in  $\text{mg}/\text{m}^3$ . When calibrated against standard reference measurements, the amplitude of this signal relates directly to the dust concentration in the stack and this can be presented as a reading in  $\text{mg}/\text{m}^3$ .




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## Features

- Double Pass Principle
- Low Dust Concentration 0-7.5 $\text{mg}/\text{m}^3$  and high range 0-1000 $\text{mg}/\text{m}^3$
- Measure Opacity in 0-100%, Dust in  $\text{mg}/\text{m}^3$  with reference to ISO-Kinetic Sample Method.
- Robust design with Aluminium Casing and stainless steel part
- Communication via RS485 Modbus RTU
- Failsafe Shutter (Optional)
- Online Calibration (Optional)
- Cloud DAS or Station (Optional)

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## Benefit

- Suitable for highly fluctuating dust concentration
- Better accuracy over shorter path lengths
- Reliable application due to redundant measurement
- Low maintenance due to self-monitoring function
- Future-proof for decreasing limit values

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## Application

- Steel & Iron Plant
- Cement Plant
- Tunnel for visibility
- Palm Oil Mill
- Refinery Oil Mill
- Aluminium Plant
- Power Plant Boiler
- Cement Works
- Waste Incinerator
- Petrol Chemical Plant

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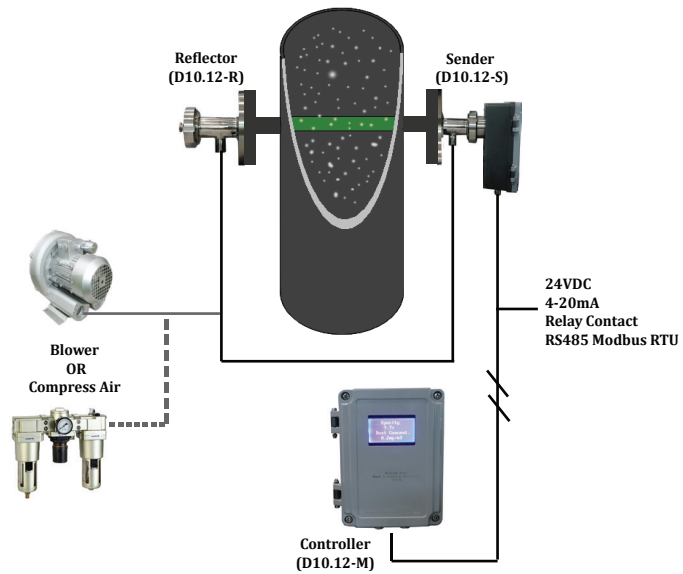
## System Components

- Mounting Flanges
- Reflector
- Controller
- Sender

Typical Installation

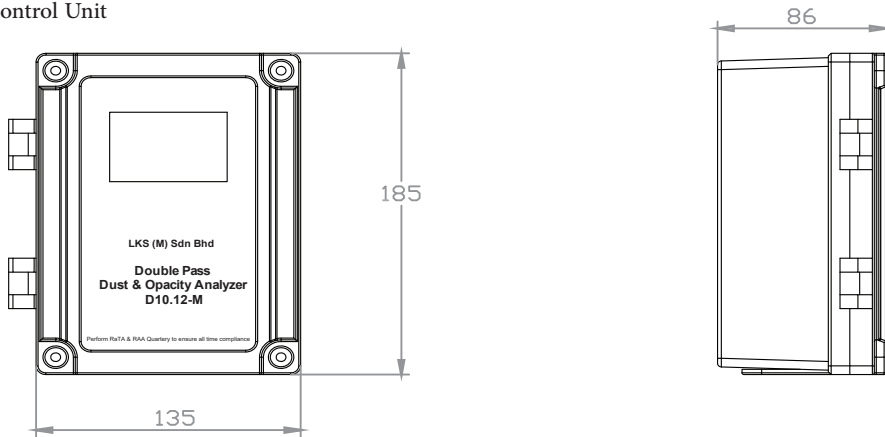
Optional Accessories

- Blower Auto Cleaner (415 VAC)
- Compress Air Cleaner

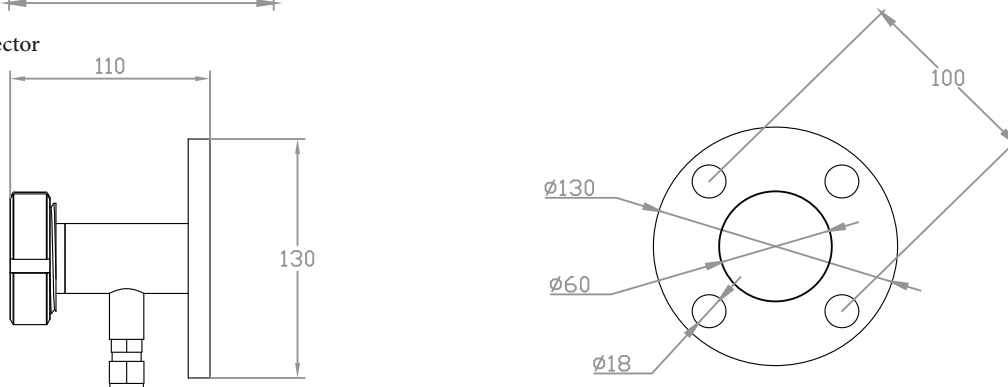


Dimension

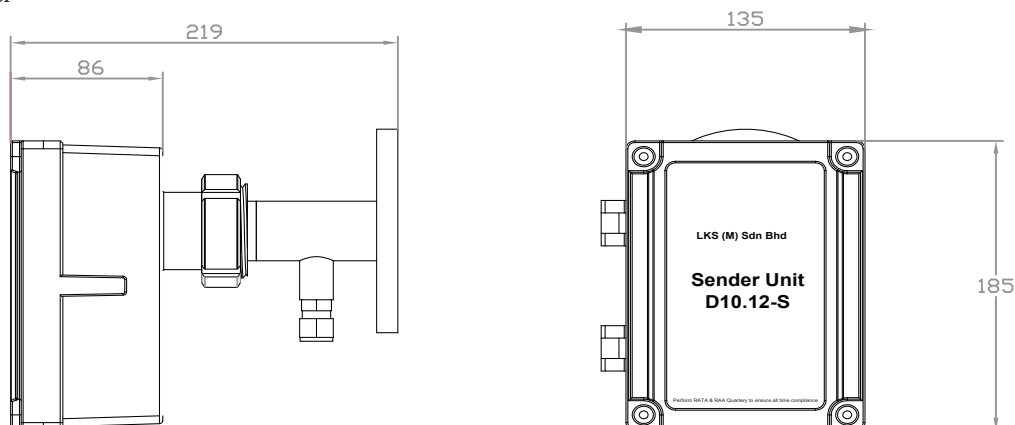
Control Unit







Reflector



Sender



Accessories

	<p>Rubber Alignment (Gasket)</p>
	<p>Fitting (Blower)</p>
	<p>Blower Kit for Air Purge</p>
	<p>Compress Air Kit Use with compress air purge. Includes pressure regulator, in-line filters and compressed air adapters for the purge body.</p>

Ordering Number

Description	Model
Controller	D10.12-M
Sender	D10.12-S
Reflector	D10.12-R
Air Blower Cleaner Set	D10.AB
Air Compressor Filter Set	D10.AC