

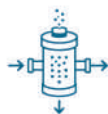
CE



Agasthya 2013 Series

BI 7020

Tribo Electric Dust Monitor



Auto Purge
Facility



Direct Server
Connectivity



Continuous
Operation



Reparable
Components



24/7 Spares
Availability



NPL/TÜV
Certified

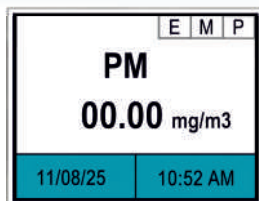
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Measurement Units



- Programmable Measurement Units (mg/m^3 & mg/Nm^3)
- Measuring Range: 0–1000 mg/m^3
- High Accuracy: $\pm 1\%$ FSD
- High Resolution: 0.1 mg/m^3
- Direct In-situ Dust Measurement
- Optimized for Low Dust Monitoring
- Continuous Real-Time Monitoring
- Charge Induction Sensing Technology

Probe Specifications



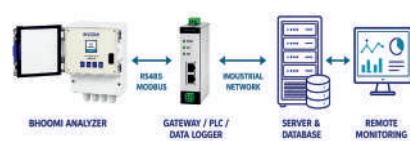
- SS316 Probe Construction
- Auto-Purge Probe Cleaning
- Dust Build-up Resistant Probe
- In-situ Probe Installation
- Custom Probe Lengths Available
- 90° Duct Wall Mounting
- Suitable for High Stack Temperatures (Up to 300°C)
- Stable Measurement Under Vibration

Communication & Output



- Modbus Protocol Support
- Wall-Mounted Electronics
- 24 VDC Power Supply

Analyzer Features



- Direct Server Connectivity
- Remote Monitoring & Data Access
- NPL/TUV Certified
- Zero-Maintenance Continuous Operation
- Component-Level Repairability
- 24/7 Spares Availability
- Automatic Drift Compensation
- Rugged Industrial Design
- No Manual Alignment Required
- IP65 Weatherproof Enclosure

Reliability & Performance



- Continuous Online Monitoring
- Reliable Low Dust Detection
- Stable Performance in Harsh Environments
- Designed for Industrial Stack Monitoring
- High Operational Reliability
- 4–20 mA Analog Output
- RS485 Communication

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KEY FEATURES

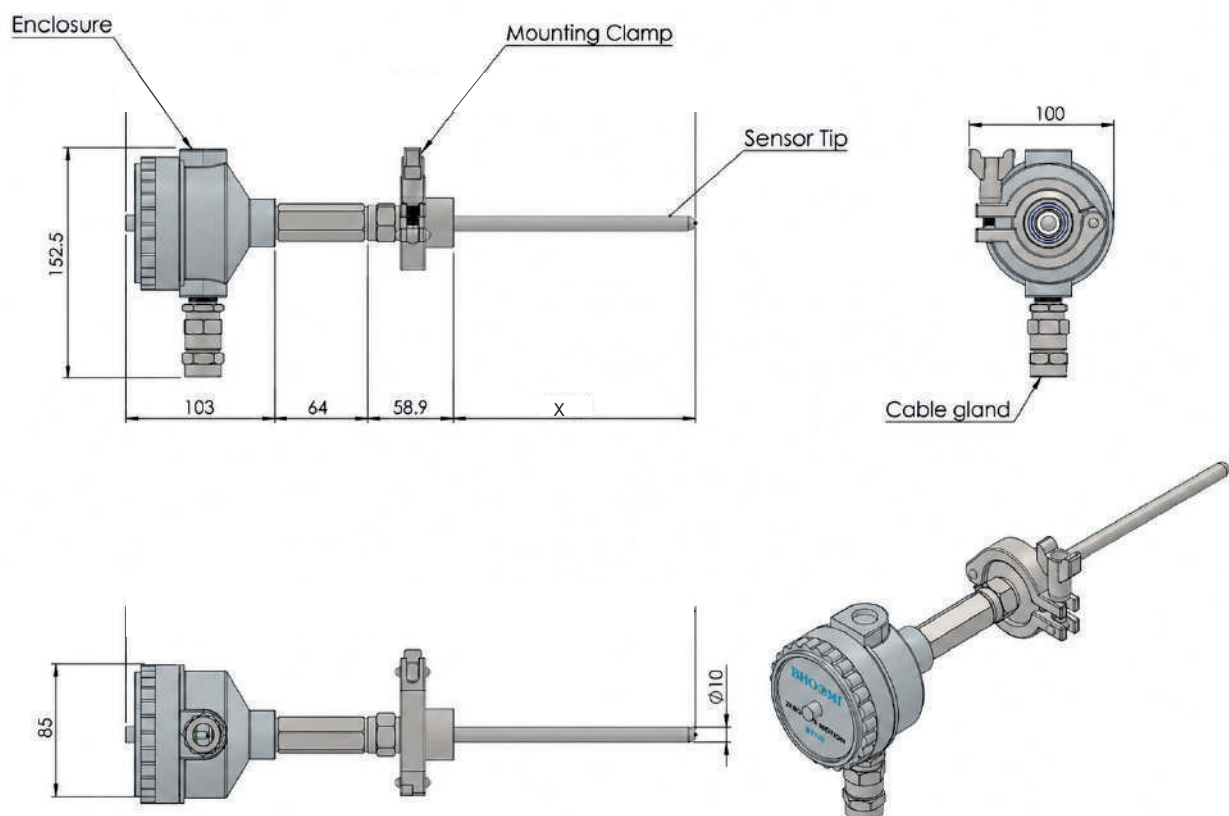
- Direct measurement in exhaust flue gas flow – In situ
- Unit programmable in mg/m^3 & mg/Nm^3
- RS485, supports MODBUS protocol
- Rugged design with no moving parts so low maintenance
- No manual adjustment/alignment required
- Automatic drift compensation
- Colour of particles will not affect the signal output
- Buildup of dust on the probe will not affect monitoring
- Vibration has no effect on the signal
- IP65 rating enclosure

APPLICATIONS

- Thermal power plants
- Steel & metallurgical plants
- Cement plants
- Chemical & fertilizer plants
- Paper & pulp mills
- Waste incineration/waste-to-energy
- Mining & minerals
- Sponge iron plants
- Boilers & captive power units
- Process stacks
- DG sets

DIMENSIONS - SENSING PROBE

Note: All dimensions are in mm
Probe length (X) is variable



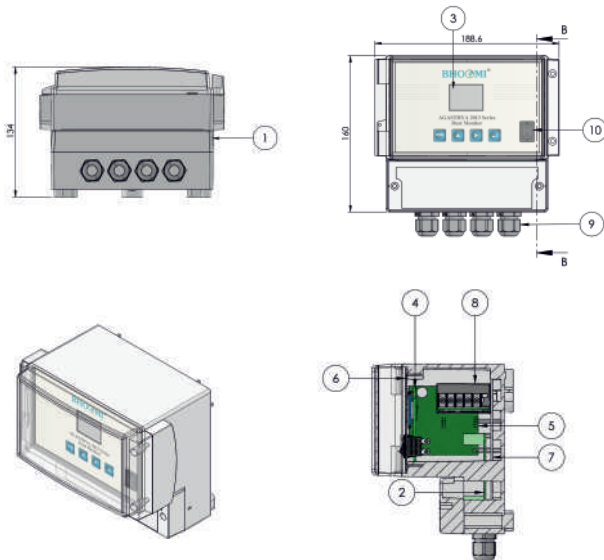
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DIMENSIONS - DISPLAY UNIT



Sr.No	Part Name
1	Enclosure 188X160X143
2	Power supply card
3	TFT display
4	MCU card
5	HART card
6	Display mounting plate
7	Base Mounting plate
8	SMPS
9	Cable gland
10	Rocker switch

TECHNICAL SPECIFICATIONS

Measuring range	0-1000 mg/m ³
Units of measurement	mg/m ³ , mg/Nm ³
Accuracy	±1% FSD
Resolution	0.1mg/m ³ display resolution
Stack temperature	-20° to 300°C
Material of construction	SS 316
Probe insertion length	305, 457, 609, 762, 914 mm (Customized length available)
Positioning	90 degree to duct wall

Power supply	24 VDC
Output	4 – 20 mA Analog output
Digital communication	RS485, Modbus
Mounting	Wall
Electronic unit enclosure rating	IP65
Cable type	3 core Interconnection cable
Ambient temperature	-20 to 50°C
Operating humidity	5 – 95%

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Tribo Electric Dust Monitor



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SAMPLE ORDER CODE FORMAT

BI 7020	1	2	WA	A	X
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Code	Description
BI 7020	Tribo Dust Monitor
1	24 VDC
2	12 Inch Probe Length
WA	With Accesories
B	Without Purging
X	With Canopy (Weather Protection)

PREFERRED ORDER CODES

BI 7020 - 1 - 2 - WA - B - Y	Tribo Dust Monitor - 24 VDC - 12 inch - With accessories - Without Purging - Without Canopy
BI 7020 - 1 - 3 - WA - B - Y	Tribo Dust Monitor - 24 VDC - 18 inch - With accessories - Without Purging - Without Canopy
BI 7020 - 1 - 4 - WA - B - Y	Tribo Dust Monitor - 24 VDC - 24 inch - With accessories - Without Purging - Without Canopy

ORDERING INFORMATION

BI 7020		Power Supply	Probe Length	Accessories	Purging	Weather Protection
Model		/ X	/ XX	/ X	/ XX	/ X
BI 7020	Tribo Dust Monitor					
Power Supply						
1	24 VDC*	1				
2	230 VAC	2				
Probe Length						
1	6 inch		1			
2	12 inch*		2			
3	18 inch*		3			
4	24 inch*		4			
5	Custom size in inches		5			
Accessories						
WA	With accessories*			WA		
OA	Without accessories			OA		
Purging						
A	With purging				A	
B	Without purging*				B	
Weather Protection						
X	With canopy					X
Y	Without canopy*					Y

Note - (*) Preferred options

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Our NPL & TUV Certified Products

Continuous Emission
Monitoring System

BI 7000



Online Stack Flow
Meter

BI 7300



Online Stack
Dust Monitor - Opacity

BI 7010



Tribo Electric Dust
Monitor

BI 7020



Our Other Gases & Liquid Analyzers

Insitu Zirconia
Oxygen Analyzer

BI 2100, BI 2000



Portable Flue
Gas Analyzers

BI Flexi Pro, BI 1XX, BI 2XX



Process Gas Analyzers

**BI 3XX, 4XX, 6XX
BI 4XXX, BI 8000, BI 7400**



Renewable Energy Gas
Analyzer **BI 7100, BI 7110,
BI 7120, BI 7130**



Ambient Air Quality
Monitoring System

BI 9000



Multiparameter Water Quality
Monitoring System

BI 1000



Water Sensors

BI XXXX



Single & Dual
Channel Controllers

BI 13XX



Panel Mount

Wall Mount