

Technical Specification

Sensor Unit

| | | |
|------------------------------|------------------------------------------------------------------------------|----------------|
| Measurements | Air flow, direction and temperature | |
| | Flow | Temperature |
| Flow Units | m/sec | °C |
| Measurement Technique | Ultrasonic | PT100 |
| Measurement range (typical*) | -40 to +40m/sec | -25°C to +50°C |
| Accuracy | +/- 0.1m/sec @ 20m/s 0.2m/s @ 20-40m/s | 0.5°C |
| Response Time | 15 Seconds | 15 Seconds |
| Resolution | 0.05m/s | |
| Ambient Temperature | -20°C to +50°C | |
| Power supply requirement | 9 to 36V DC, 1% pk-pk, 20 MHz bandwidth (3VA Max) from seperate power supply | |
| Construction | Stainless Steel 316 to IP66 | |

Compliances

| | |
|-------------|---------------------------------------------------|
| EMC | EN61326-1:2006 & EN50270:2006 directive compliant |
| Low Voltage | 73/23/EEC directive compliant) |

Customer Interface

| | |
|-----------------------|----------------------------------------------------------------------------------|
| Flow Analogue outputs | 1 x 4-20mA current output, 400Ω max load, range 0 to 20m/sec |
| Temp Analogue outputs | 1 x 4-20mA current output, 400Ω max load, range -25°C to +50°C |
| Relay Outputs | 2 x volt-free SP contacts, 50V 400mA max, for flow direction and fault condition |
| Communications Port | RS485 for local communication with laptop or modbus protocol |

Optional Items

| | |
|---------------------|--------------------------------------------------------|
| Power Supply | 90/264V AC, 47-63Hz, 60W 12V DC @5A (or 24V DC @ 2.5A) |
| Tunnel Display Unit | For local display of sensors outputs (TunnelTech 710) |
| Serial Data | RS485 Modbus Protocol |

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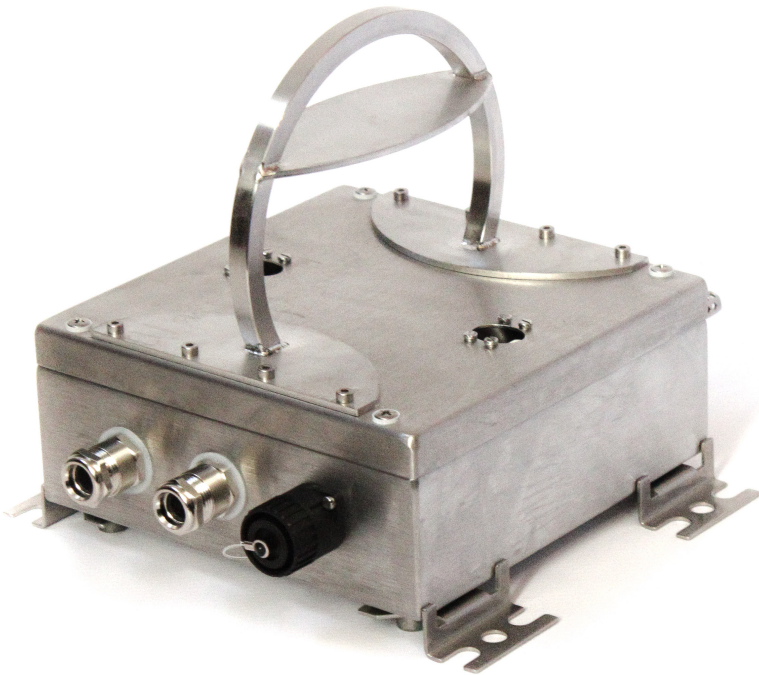
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Distributor

CODEL
Monitoring Solutions

TunnelTech 305 Series - Stainless Steel Air Flow Monitor



A low cost precision road & rail tunnel monitor using well-proven technology providing accurate and rapid results.

The TunnelTech 305 is an advanced technology air flow monitor developed to provide superb accuracy and reliability at a very competitive price.

Single point ultrasonic measurement technology,

Uninterrupted by traffic flow and sound reflections

No moving components providing maintenance free operation

Stainless steel construction,

Integral temperature measurement

ISO 9001:2008

Quality Certification

Monitoring Solutions



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Designed exclusively for road and rail tunnel applications building on years of experience and proven technology.

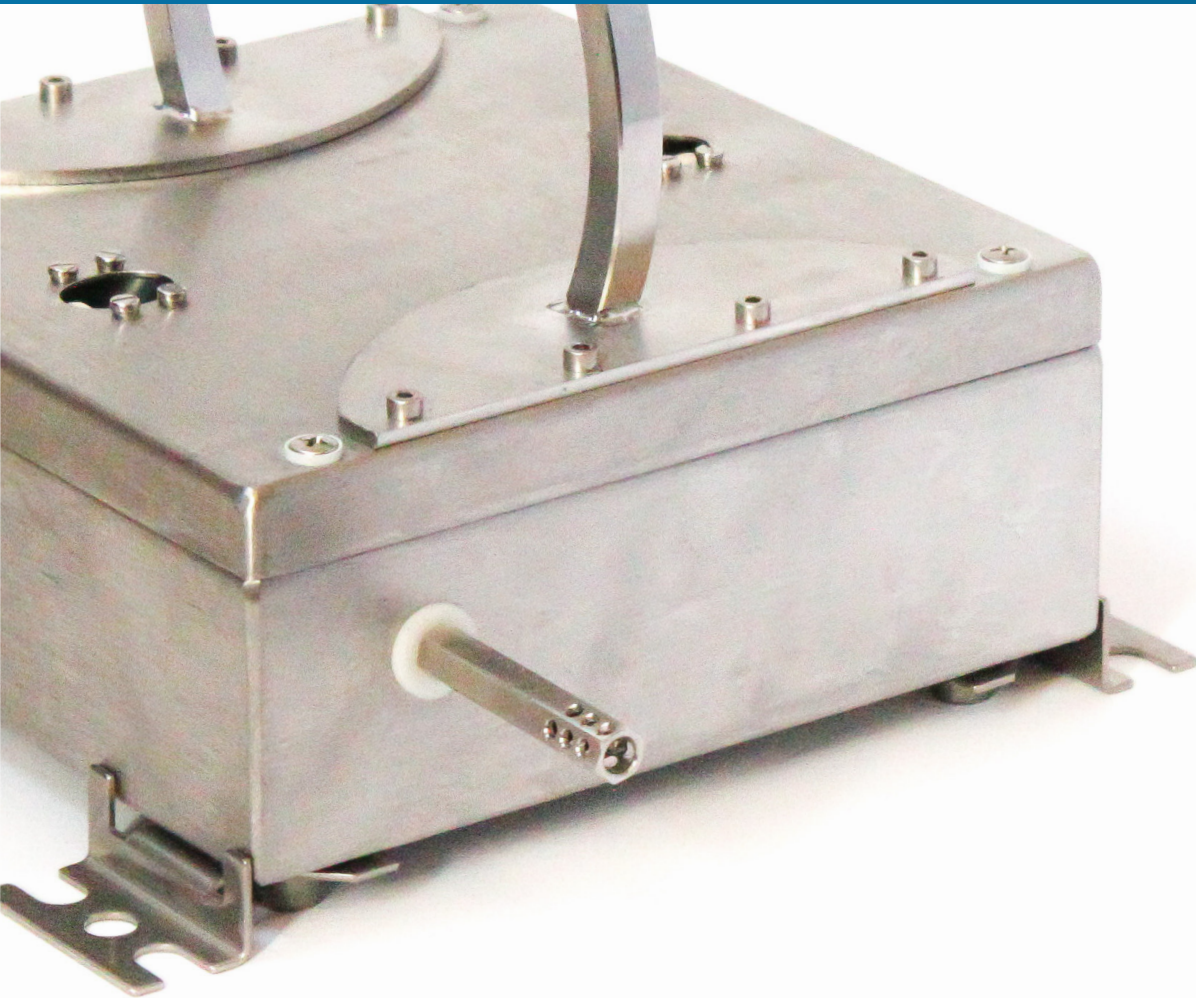
Fully configurable analogue and alarm outputs are provided. An RS485 link can be utilised to deliver data via MODBUS protocol to a SCADA system located in the tunnel control centre.

The TunnelTech 305 Air Flow Monitor, is an essential part of any road or rail tunnel safety system. Firstly, it monitors the air flow measurement as well as the direction of flow inside the tunnel and ensures that the tunnel ventilation system provides sufficient clean air to protect tunnel users health and for drivers to clearly see the road ahead.

The TunnelTech 305 uses ultrasonic technology to ensure high accuracy and having no moving parts, reliability levels are very high and maintenance requirements are very low.

The sensor is constructed using stainless steel for ultimate protection against the harsh environments found in tunnels.

Fully configurable analogue and alarm outputs are provided. An RS485 link can be utilised to deliver data via MODBUS protocol to a SCADA system located in the tunnel control centre.



Integral temperature measurement and stainless steel construction.

The TunnelTech 305 contains no moving components and requires no routine maintenance.

