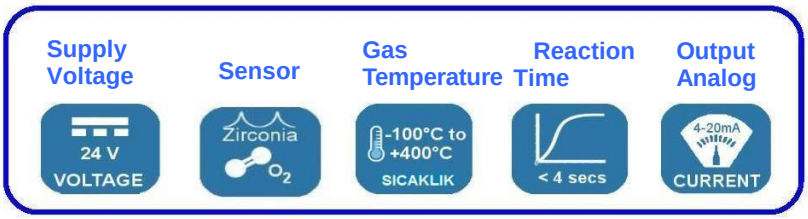
Technical Details

Zirconium O_2 Analyzer

Oxygen Analyzer

The compact zirconium oxide analyzer is used to measure percent (0-25%) oxygen in combustion processes. The probe is made of 316 stainless steel and can operate at temperatures up to 400 °C. Sample gas in sensor chimney or furnace. It measures inside and works without the need for an air reference. Easy assembly with flue apparatus and is long lasting.



FEATURES

OXYGEN ANALYZER offers its customers a flue gas or ventilation monitoring system.

The barometric pressure correcting sensor is inside.

4-20 mA analog output is provided as standard.

The sensor module can be easily replaced, no special tools are required.

It can be easily calibrated in fresh air.

APPLICATIONS

Combustion control of natural gas, fuel-oil, diesel, coal and biomass burning boilers

Excess air analysis

Boiler trim control

Incinerators

Steam Power Plants

Combined cycle gas turbines (CCGT)

Ceramic kiln monitoring

PERFORMANCE

Measurement technology Zirconium Oxide (ZrO_2)
Gas Oxygen (% O_2)
Measuring Range 0.1-25% or 0,1-100 %
Output resolution 0,01 mA or % 0,01 O_2
Accuracy (% 0,1-25) <% 0,25 O_2
Warm-up Time : 60 second.
Reaction Time (T90) < 4 seconds
Reproducibility <0.25%
Sample Current Effect 0.5% full of scale
Permissible Flue Gas Temperature: + 400 °C
Cell Temparature + 700 °C
Gas Flow rate 0-10 m/sec
Ambient Temperature -30 / 70 °C
Operating Pressure: 2mbar –3 bar maximum
Protection Rating : IP 65

- **Do not need reference air**
- **Long-life sensor technology**
- **Integrated internal heating element**
- **Temperature and barometric pressure compensation**

RoHS

Technical Details

Electrical Input & Output

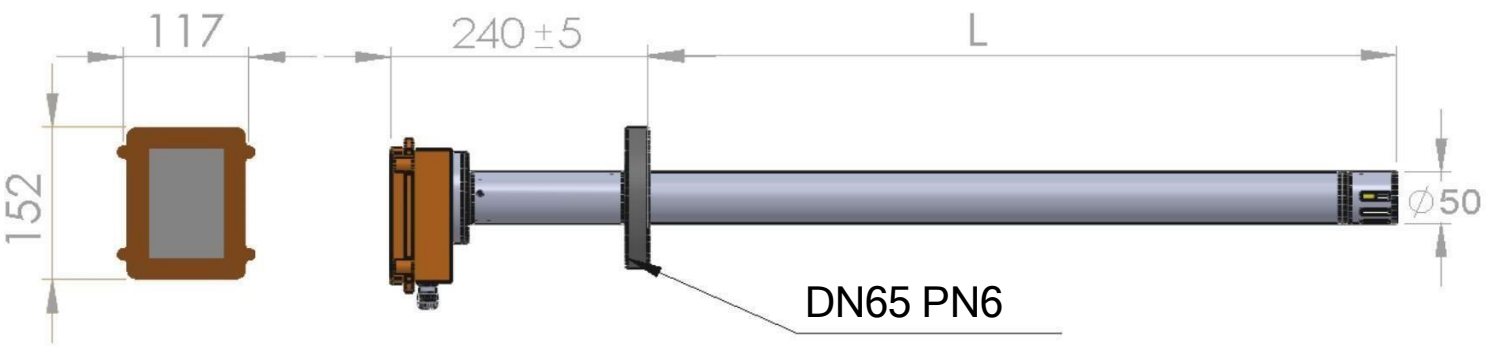
Power Supply	24VDC, ±10% LPS
Power Consumption	700mA maximum @ 24VDC
Analog Output	4—20mA
Output Ranges (oxygen)	0-25% / 0-100 % O_2
Output Ranges (heat)	-50 to +400°C
Output Ranges (pressure)	260—1260mbar
Digital Communication	RS485 protocol (Optional)

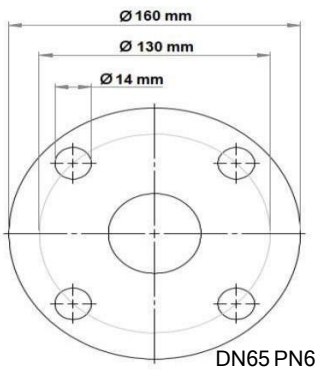
Mechanical Features

Warm-up Time	< 90 sec
Time to stabilize	< 5 min
Material	304,316L,PTFE,Aluminium Platinum and Zirconium
Dimensions	Attached
Weight	6,250 Kgs
Flange Connection	DN65 PN6 EN 1092
Filter Element	Sinter Metal Inox

Analyzer Dimensions

All dimensions are given in mm. Tolerance = ± 1 mm





Analyzer Selection Code Table . HT-YTK-PP-800-0

HT	-	HDC	-			XXX		X

Work Environment	Probe Size	Output Function
HDC: High Dust Concentration LDC: Low Dust Concentration	L: 300,500,700,	0 : 4-20 mA 1: 0-10V, 4-20 mA,RS232 2: RS485 Modbus

CAUTION Do not exceed the maximum values and make sure the sensor is working properly. Follow all wiring instructions carefully. Incorrect cables can cause permanent damage to the device. Zirconium dioxide sensors are damaged by silicon. Vapors from RTV rubbers and sealants (organic silicon compounds) are known to affect zirconium oxygen sensors and should be avoided **DO NOT use chemical cleaners.**

RoHS