



Model
1635 Percent Water Vapour Analyser



Moisture measurement improves product quality and consistency, and reduces fuel costs for drying processes.

The Novatech 1635 % Water Vapour Analyser provides rapid payback for drying processes including:

- Paper machine drying hoods
- Timber drying kilns
- Ceramics drying
- Textile drying
- Flue gas water vapour content
- Gypsum and plasterboard drying

The Novatech 1635 % Water Vapour Analyser can provide accurate moisture control of drying oven atmospheres up to 600°C:

- Easy-to-operate, reliable, no regular calibration needed
- Select the unit of measure to display for your application, for example:
 - Percent water vapour
 - Gram per kilogram or lb per 1000 lbs
 - Dew point temperature
 - Relative humidity
- Accurate, rapid response, low drift, robust Zirconia oxygen sensor
- Highly responsive, eg: typically 3 seconds for indirectly heated applications
- RS232 / 485 computer / printer interface. Modbus™
- Two isolated 4-20 mA outputs
- Programmable alarms

Accuracy and reliability

The oxygen sensor, which measures water vapour due to O₂ displacement in the oven atmosphere, provides accurate and virtually drift-free measurement for years.

Controlling humidity

The Novatech 1635 % water vapour analyser can be used with controllers, including PLCs, to provide accurate, continuous control of the moisture level in the dryer or oven.

Direct Fired Processes

The 1635 measures the “wet” oxygen level of the process using an in situ zirconia oxygen probe and can accept a remote signal input (4-20mA) proportional to the “dry” oxygen level to then calculate the percent water vapour of the process. If this signal is not available from an existing CEMS installation then the 1635 can be supplied with a reference gas sensor (RGS-01) and a simple sampling system to determine the “dry” oxygen level of the process.

Specifications

Analyser	Sensing Probe	Reference Gas Sensor
Model 1635	Model 1231	(Required for directly fired applications only) Model RGS-01
Range	Length	Connections
Keyboard set in any of the following ranges: 0 to 100% volume of water vapour 0 to 100% Relative humidity 0 to 10,000g/kg or lb/1000lb Moisture - 50 to 100°C Dew point All ranges have adjustable zero and span.	250mm, 350mm, 500mm, 750mm	Inlet and outlet, 3/8 inch tube compression fitting
Outputs	Process temperature	Power Supply
Two isolated 4 to 20 mA DC linear outputs for humidity & temperature or optionally Oxygen, alarm relays and RS-232 computer interface.	0 to 600°C	Supply fed from the 1635 analyser
Span and Zero	Process connection	Weight
Keyboard set for each range. When the measurement is below the minimum value for any range, the output will be frozen to a keyboard selected value.	1.5 inch BSPT or NPTT	3.3 kg
Displays	Operating temperature	Mounting
32 character digital display in English language.	720°C with integral heater safety interlock for applications where flammable gas may come in contact when burner(s) are not turned on.	Surface
Alarms	Head temperature	
Self diagnostics for the probe and analyser automatically run each minute, alarms are displayed in English language.	100°C	
Speed of response	Reference air connection	
Typically 3 seconds for indirectly heated applications. Typically 30 seconds for directly fired applications. The sensor response time is 100 milliseconds.	1/4" tube	
Calibration	Reference gas flow	
Automatic, no adjustments are necessary.	Less than 50cc/minute	
Accuracy	Probe cable	
Refer to Novatech for calculation for specific applications.	Supplied with weatherproof connector to specified length, maximum 100 metres	
Repeatability	Power supply	
Refer to Novatech for calculations for specific applications.	Supplied from model 1635 analyser	
Power supply	Weight	
110 or 240 VAC, 50/60Hz, 115 watts with probe connected.	0.6kg plus 0.33kg per 100mm of length	
Weight		
3.6kg		
Dimensions		
280mm wide x 180mm high x 100mm deep		

Distributed by:



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