

# EC1635

## Water Vapour Transmitter

The Ecotech 1635 Water Vapour Transmitter provides accurate moisture control of drying oven atmospheres up to 600°C. The 1635 can also be used with various controllers (e.g. PLCs) to provide accurate, continuous control of moisture levels in drying processes.

The robust zirconia sensor will provide accurate and virtually trouble-free measurement of Oxygen for many years.



### Features

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- Easy-to-operate, reliable, no regular calibration needed
- Select the analyzer readout for specific applications including:
  - Percent water vapour
  - Grams per kilogram
  - Dew point temperature
  - Percent Relative Humidity (RH)
- Accurate, rapid response, low drift utilising a Zirconia Oxygen sensor
- Highly responsive, e.g.:  $\leq 3$  seconds for indirectly heated applications
- RS232/485 computer/printer interface
- Two isolated 4-20 mA outputs
- Programmable alarms



# ECOTECH

WORLD CLASS  
environmental  
MONITORING

## Specifications

### Sensor (Model 1635)

Range:	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.
Outputs:	Two isolated 4 to 20 mA DC linear outputs for humidity & temperature or optionally Oxygen, alarm relays and RS-232 computer interface.
Span and Zero:	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. Auto ranging from 10-30 to 100% Oxygen.
Display:	32 character digital display in English language.
Alarms:	One or two zirconia oxygen probes or sensors; Stack or spare thermocouple, type K or R; Main flame safety interlock (for heated probes only); Purge pressure switch; Dual fuel selector
Outputs:	Two linearised 4-20 mA DC outputs (max. load 1000?)
Alarms:	Self diagnostics for the probe and analyser automatically run each minute, alarms are displayed in English language.
Speed of response:	Typically 3 seconds for indirectly heated applications. Typically 30 seconds for directly fired applications. The sensor response time is 100 milliseconds.
Calibration:	Automatic, no adjustments are necessary.
Accuracy:	Refer to Ecotech for calculation for specific applications.
Repeatability:	Refer to Ecotech for calculation for specific applications.
Power supply:	0-50°C; 5-95% RH (non-condensing) 24 hours < 0.5% of reading
Connection Cable:	Special cable containing shield, thermocouple compensating lead, sensor conductors & heater conductors where a heated probe or sensor is used
Power Requirements:	110 or 240 VAC, 50/60Hz, 115 watts with probe connected.
Weight:	3.2kg
Dimensions:	300mm wide x 125mm high x 95mm deep

### Sensing Probe (Model 1231)

Length:	250mm, 350mm, 500mm, 750mm
Process temperature:	0 to 6000C
Process connection:	1.5 inch BSPT or NPTT
Operating temperature:	7200C with integral heater safety interlock for applications where flammable gas may come in contact when burners are not turned on.
Head temperature:	1000C
Reference air connection:	1/4" tube
Reference gas flow:	Less than 50cc/minute
Probe cable:	Supplied with weatherproof connector to specified length, maximum 100 metres.
Power supply:	Supplied from model 1635 analyzer
Weight:	0.6kg plus 0.33kg per 100mm of length

### Reference Gas Sensor (Model RGS-01)

(Required for directly fired applications only)

Connections:	Inlet and outlet, 3/8 inch tube compression fitting
Power supply:	Supply fed from the 1635 analyzer
Weight:	3.3kg
Mounting:	Surface



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