

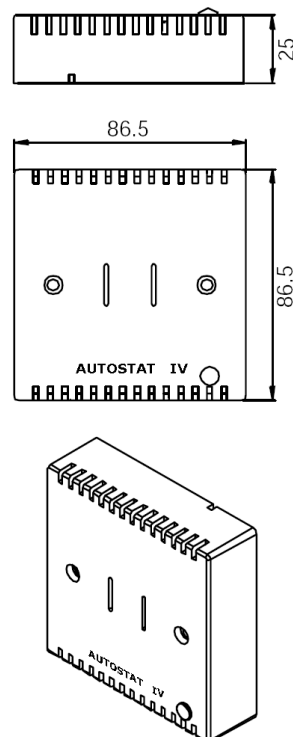
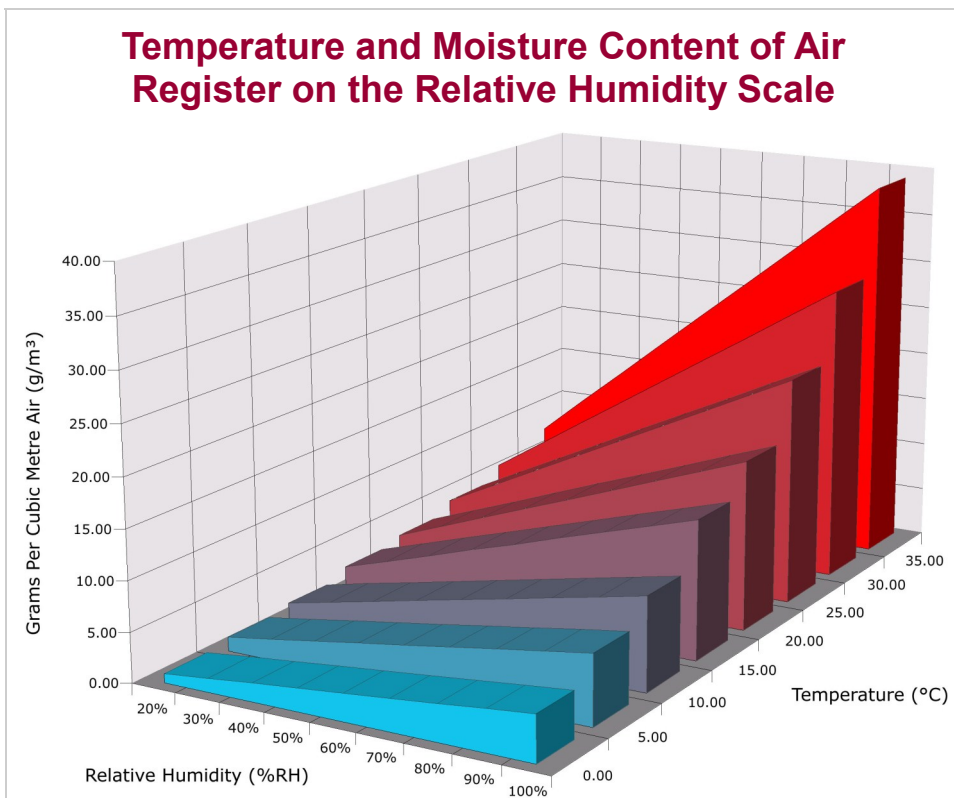
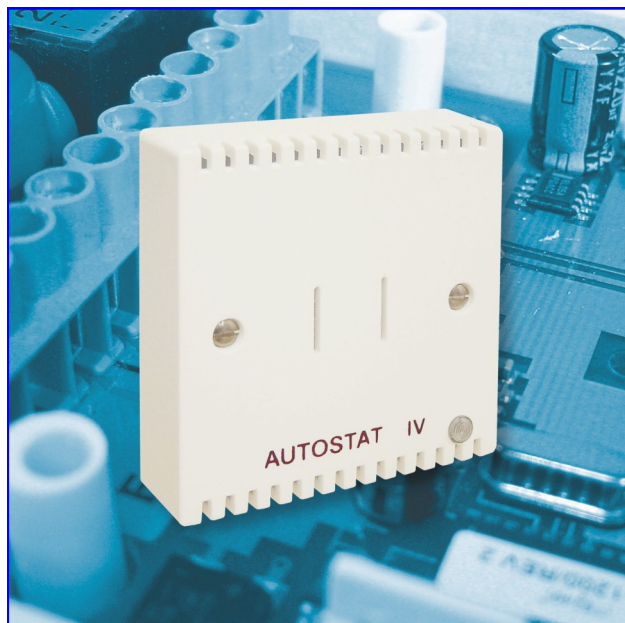
Autostat IV

Advanced Humidity Controller & Datalogger

About Autostat IV

The Autostat IV is an intelligent, microprocessor driven controller, which unlike conventional humidistats' is based on a determination of absolute humidity, not relative humidity. The important difference between the two is that absolute humidity is not affected by the temperature of the surrounding environment, making the Autostat perfectly suited to environments with widely fluctuating air moisture content, and temperature/condensation "noise" (kitchens, laundry rooms, shower & bathroom).

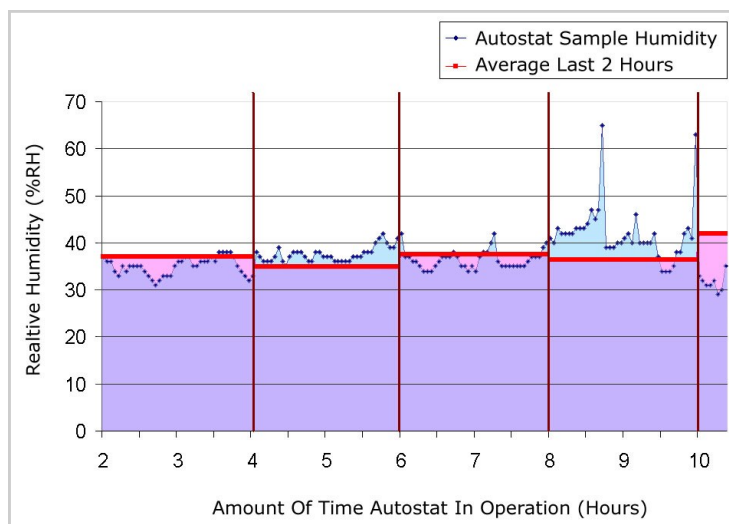
By way of example, cooking and tumble dryers produce copious amounts of water vapour, however a local RH% controller would register only a slight increase in RH% due to a simultaneous increase in temperature causing the air to hold more moisture (See graph below). Increased ventilation would therefore not be triggered. The Autostat would however identify a change in the moisture content of the air and react accordingly.



The Autostat is protected by the following patents: 2316188 (UK), 6230980B1 (US), 2262657 (Canada), H10-509502 (Japan), 0917677 (Ireland) and International Patent PC/GB97/02155

Autostat Operation

The Autostat samples the surrounding environment at regular intervals, stores and averages the results over the previous two hours and uses this as a reference base of humidity for the next two hours. When the measured humidity exceeds this reference base by a predetermined amount the controller triggers action, as illustrated in the graph below.



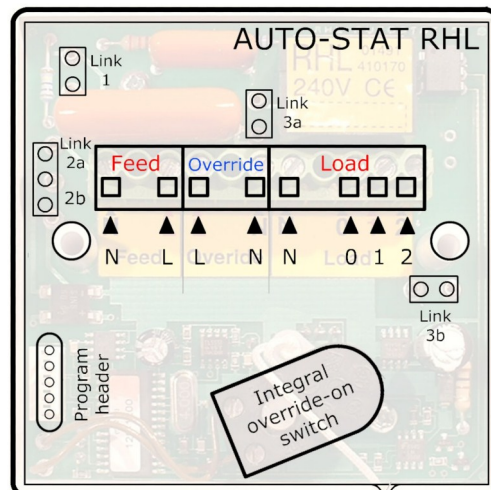
Another sample is taken after a few, the difference between this and the initial trigger reading is used to calculate a total running time for the ventilation equipment to operate. This mechanism results in the ventilation not being influenced by humidity noise, resulting in much more consistent in its operation.

Autostat Options

Autostat IV is pre programmed at the factory and should require no adjustment through its lifetime. The units operate on 240V AC and 12V AC/DC and provide output control through relay load output position 1.

- Integral override on pull switch
- Remote override on
- Light switch trigger with proportional on time hold
- Voltage free output control with switch over relay
- On board program header, with Autostat IV programming software available from website
- Link settings for 12/240v ac or voltage free relay (items factory set)
- Autostat IV spreadsheet to generate custom graphs on downloaded log data
- Tri-coloured LED Status indicator

Autostat IV Link/Component Diagram



Operation modes	Specification
Standard	Auto humidity control
Manual	Override on.
Internal bathroom	Timer overrun Auto 1 - 15 minutes. Proportional on time
Control Settings	
Controlling humidity range	Auto set 300 pa at 20 °C Auto changing with temp
Auto Humidity temperature control Range	0 >9, 10>19, 20>29, 30>39 40>50 °C
Electrical Range	
Relay	S.P.C.O
Load Resistive	10 Amps
Load Inductive	3.5 Amps
Supply Voltages	240V 50Hz & 12V AC SELV
Data	
Data Storage (Max/Min/Av)	Relative Humidity RH Temperature °C Vapour Pressure Pa
Data	1 per hour > 10 days 1 per 6 hours > 1 year
Operating Data	Fan run time, date/time Number of times user turns system on, + date from download time to last switch off