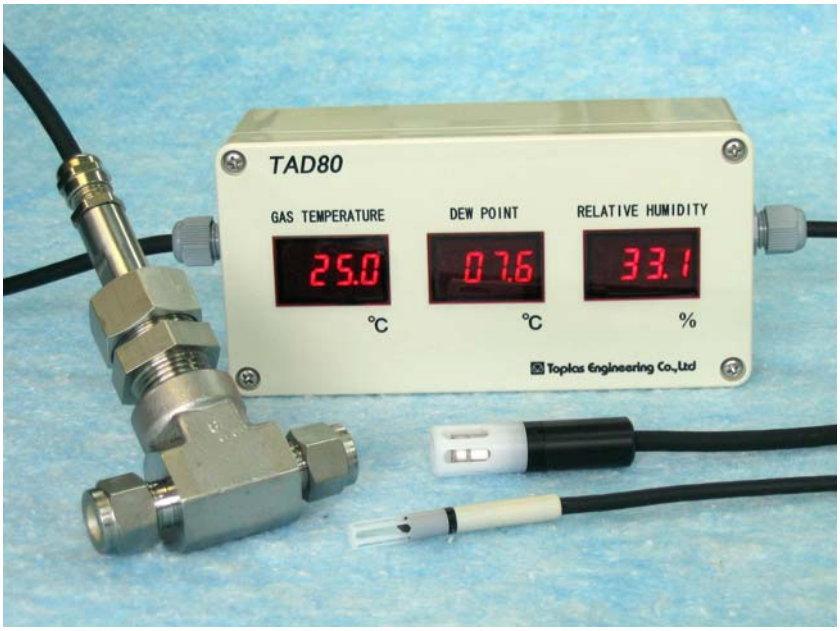
TAD801/TAD801L, TAD802/TAD802L

Temperature+Relative Humidity+Dew Point Transducer

- **Precise measurements of relative humidity**
- **Three analog outputs of 0/5V**
- **Available for hydrogen environments**



TAD802L

Sensor probe:

Left: High or reduced pressure-resistant type with a R1/2 attachment and a female branch tee (Option)

Middle: Narrow space type

Right: Standard type

Features:

- Microprocessor-equipped transducers ensure accurate measurements of relative humidity and dew point.
- The transducers deliver separate analog outputs of 0/5V for gas temperature, relative humidity and dew point.
- Digital display is also available. (801L and 802L)
- The TAD801(L) transducers are designed for precise measurements of relative humidity and dew point.
- The TAD802(L) transducers use an interchangeable humidity sensor. No adjustments are required when the sensor is replaced.
- The transducers utilize a highly durable humidity sensor having an excellent durability even in high temperatures and humid atmospheres such as 80℃/90%RH.
- Three kinds of sensor probes are available for standard, narrow spaces and high or reduced pressurized-environments.
- The transducers with a pressure-resistant probe can perform significant durability in terms of measuring relative humidity and dew point even in frequent condensation of pressurized-hydrogen environments over a long period of time.

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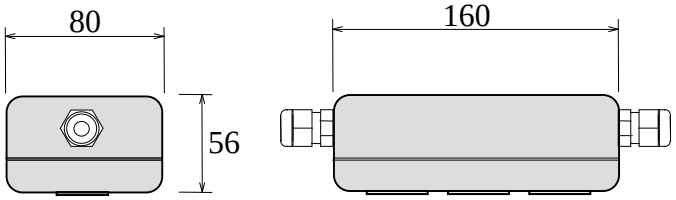
Specifications

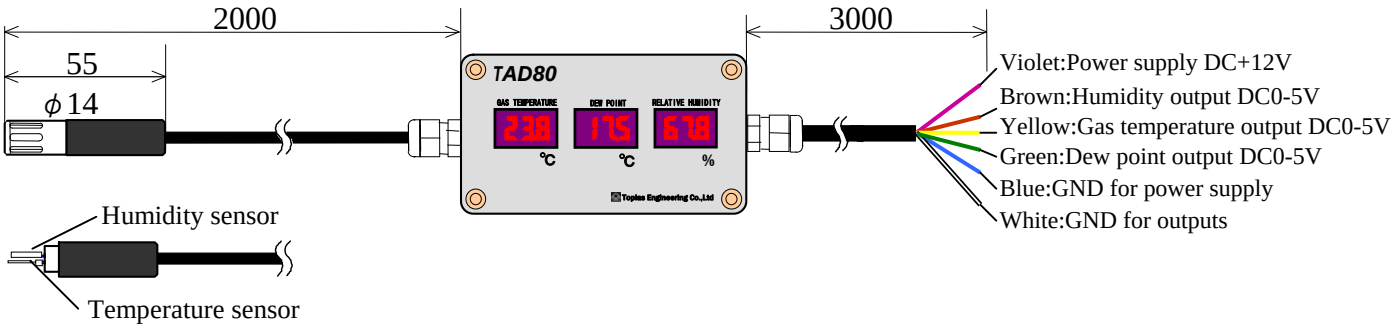
Measuring range of humidity	0 to100%RH
Applicable range of temperature	0 to 45℃（Electronics） －25 to 100℃（Sensors）
Analog output	Relative humidity: 0 to 5V for 0 to 100%RH Dew point: 0 to 5V for –25 to 100℃ (computed values) Gas temperature: 0 to 5V for –25 to 100℃
Display	801L and 802L are equipped with three digital displays.
Accuracy (*) 802(L) 801(L) (*) Related to our standard equipment	Relative humidity: ±(2.0+0.01|Tg-25|)%RH（5 to 95℃） Relative humidity: ±(1.0+0.01|Tg-25|)%RH（5 to 95℃） Gas temperature ±(0.3+0.003|Tg-25|)℃ （-25 to100℃） Dew point: Depending on the accuracy of gas temperature and relative humidity
Humidity sensor 802(L) 801(L)	Polymer-based capacitive humidity sensor: TI-A (Interchangeable) Polymer-based capacitive humidity sensor: TD-AS (Not interchangeable)
Temperature sensor	Pt100Ω thin platinum film (JIS-C1604-1997 class A)
Response time (Humidity)	15sec.（90% response when using membrane filter）
Sensor cable length	2.0m
Output cable length	3.0m
Body size	80mm(h)×160mm(w)×56mm(d) (excluding cable grounds)
Driving voltage	DC12V±10%
Consumption current	Less than 100mA

Sensor probe	Standard type	Narrow space type	High or reduced pressure-resistant type
Applicable pressure	Atmospheric pressure	Atmospheric pressure	Vacuum to 7 times of atmospheric pressure
Storage temperature range	－25 to＋100℃	－25 to＋100℃	－25 to＋120℃



Option:

- Hydrophobic coatings on a humidity sensor
- R1/2 attachment
- Female branch tee (1/4, 3/8, 1/2, 5/8 or 3/4inch φ)
- Stainless mesh cap
- Sintered plastic cap
- Certificate of JIS traceable, etc.



Outer dimensions of TAD802L with a standard probe and the wiring diagram