

# AcuVu

## Single Channel Inline Hygrometer

**Shaw Moisture Meters AcuVu** is a single channel inline hygrometer designed to meet the stringent demands of industrial applications, measuring dewpoint in process gases and dry compressed air.

The AcuVu provides real time measurement of process conditions when paired with the AcuDew dewpoint transmitter. The instrument offers 4-20 mA signal retransmission and two fully programmable alarm relays with LED indicators, which can be independently set across the full operating range of the connected AcuDew dewpoint transmitter. Set points can be viewed and adjusted from the front panel keypad and user configurations can be password protected.

For installation versatility, the AcuVu accepts a universal supply voltage of 22-253 V AC or 20-300 V DC and can be located up to 1,000 metres from the AcuDew dewpoint transmitter.

Various dewpoint ranges are available covering an overall range from -120 °C to +20 °C dewpoint (-184 °F to +68 °F). The 4-digit, 14 segment LED display can be factory configured to display in °C dewpoint, °F dewpoint, ppm(V), ppb(v), g/m<sup>3</sup> and lb/MMSCF.



\* AcuDew, dewpoint transmitter, sold separately.

Fully self-contained within a robust housing, AcuVu provides weatherproof protection to IP65 (NEMA 4) when panel mounted (1/2 DIN). Requiring little or no maintenance and with low power consumption, the AcuVu provides long term signal accuracy and fast response time, suitable for even the most challenging industrial environments.

AcuVu inline hygrometer is supplied ready to use with an instruction manual.


### Features

- Output configurable in: °C dewpoint, °F dewpoint, ppm(V), ppb(v), g/m<sup>3</sup> and lb/MMSCF
- Universal power supply input: 22-253 V AC or 20-300 V DC
- Adjustable, linear 4-20 mA or 0-20 mA retransmission signal
- Two independent alarm relays with LED indicators, fully programmable from the front panel
- Password protect feature for user configurations
- Large 4-digit, 14 segment LED, digital display
- Weatherproof rating IP65 (NEMA 4) when panel mounted
- Fully compatible with all SHAW 4-20mA dewpoint transmitters and ranges
- Various ranges available: overall range -120 °C to +20 °C (-184 °F to +68 °F) dewpoint
- Accuracy ±2 °C dewpoint (±3.6 °F) (when paired with the AcuDew dewpoint transmitter)

## Specifications

## Ordering Information

### AcuVu Hygrometer

- **Enclosure**  
¾ DIN panel mount ABS case
- **EMC Directive 2004/108/EC**  
Complies with BS EN 61326
- **Low Voltage Directive 73/23/EEC**  
EN 61010-1
- **Power Consumption**  
3.5W maximum
- **Supply Voltage**  
Universal 22-253 V AC 50-60 Hz and 20-300 V DC
- **Output Signal**  
Linear 4-20 mA or 0-20 mA fully isolated.
- **Load (max)**  
20 mA / 800 Ω / 16 V DC
- **Isolation Voltage, Test/Operation**  
2.3 kV AC / 250 V AC
- **Weatherproof Classification**  
Front panel only - IP65 (NEMA 4)
- **Approvals:** 

- **Alarm Relays**  
2 independent fully programmable switched contacts. Rated 2 A @ 250 V AC / 1 A @ 24 V DC
- **Annunciators**  
AL1 and AL2 LEDs on front panel indicate status of each alarm
- **Display**  
4-digit, 14 segment LED indicator. Red characters 13.8 mm (h) Factory configured to display: °C, °F, ppm(v), ppb(v), g/m<sup>3</sup> or lb/MMSCF
- **Weight**  
230 grams
- **Dimensions (H x W x D)**  
48 mm x 96 mm x 120 mm
- **Cut Out Dimensions**  
44.5 mm x 91.5 mm
- **Mechanical Warranty**  
24 months in case of faulty workmanship and defective parts

### To order an AcuVu Hygrometer

**AcuVu - (R) Range - (U) Units - (V) Power**

**R** - Choose the required range of the AcuDew Dewpoint Transmitter using the AcuDew Specification Sheet.

**U** - Choose the required units

**C:** °C dewpoint      **F:** °F dewpoint  
**P:** ppm(v)            **B:** ppb(v)

**V** - Choose required power supply:

**AC:** 22-253 V AC 50-60 Hz  
**DC:** 20-300 V DC 150-15 mA

**Example:**

To order an AcuVu with a measuring range of -80 to 0 °C dewpoint (grey sensor), specifying °C as units and selected power supply, please order as **AcuVu-G-C-AC**

## Related Products

### AcuDew Dewpoint Transmitter

The AcuDew is a compact, two wire, 4-20 mA, loop powered transmitter. Used for continuous measurement of trace moisture in industrial process gases or dry compressed air.

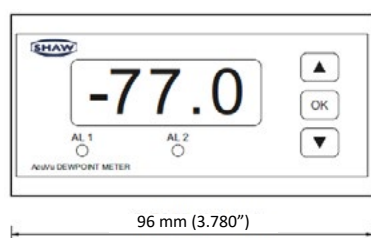
Utilising the Ultra High Capacitance SHAW Moisture Sensor, the AcuDew is robust, reliable and offers excellent sensitivity, repeatability and response speed. The transmitter incorporates the SHAW AutoCal feature and the 4-20 mA output is factory configurable in °C dewpoint, °F dewpoint, ppm(V), ppb(v), g/m<sup>3</sup> and lb/MMSCF.

Easy to install and operate, the AcuDew requires little or no maintenance and is supplied ready to use, with a Certificate of Calibration traceable to National and International Humidity Standards at NPL, instruction manual and two metres of cable.

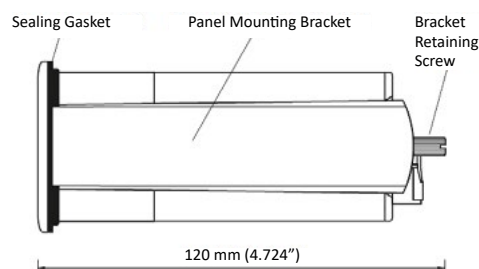


## General Assembly Diagram

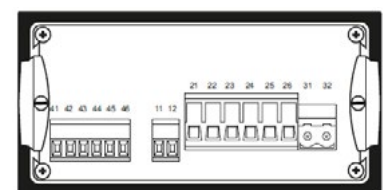
FRONT



SIDE



REAR



AcuVu\_Jss1.1