# AcuTrak 1000

## *Dewpoint Temperature Analyzer*

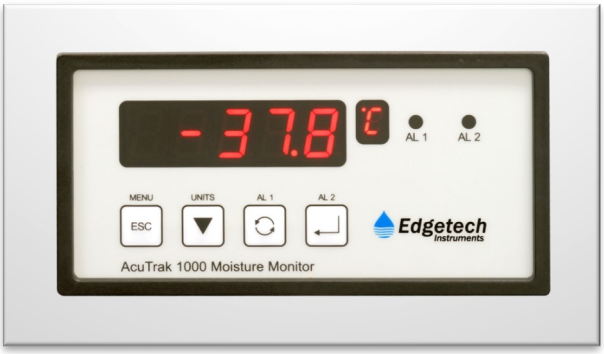
### A Dewpoint And PPMv Water Vapor Analyzer

The Edgetech Instruments' AcuTrak 1000 is a digital display analyzer used primarily with Edgetech Instruments' process dewpoint transmitters. The AcuTrak 1000 combines 4 to 20 mA input signal capability with a 24 Vdc power supply, making it compatible with not only Edgetech Instruments dewpoint transmitters but most loop powered process transmitters. It is even more powerful when it is used in conjunction with a dewpoint transmitter because the AcuTrak 1000 has the capability to calculate PPMv water vapor content from a dewpoint input signal.

In addition to providing 24 Vdc power and display capability, the AcuTrak 1000 also provides two fully programmable alarm relays, which can be independently set across the full operating range of the transmitter, and an optically isolated retransmitted 4 to 20 mA analog output signal. The front panel incorporates a large 5-digit, ½-inch high, 14 segment LED display, two alarm indicator LED's and is rated for water spray (IP54/NEMA 3) ingress protection. The AcuTrak 1000 is equipped with a digital RS485 output and an onboard pressure feature that allows the calculation of an equivalent dewpoint or a PPMv measurement, based on a user programmable constant pressure.

**Features:**

- Large 5-digit display
- Four-button membrane keypad
- 24 Vdc output power supply for connected device
- Panel mounting (DIN 43700)
- Ideal for 2-wire loop powered transmitters
- Two user-programmable alarm relays with front panel LED indicators
- Fully-controllable linear selectable 0 to 20 mA or 4 to 20 mA output for signal retransmission
- NEMA 3 (IP54) front panel protection
- RS485 port for digital output
- Ac or dc powered models available




**The AcuTrak 1000**

**Applications:**

- Compressed air
- Air separation
- Injection molding
- High purity gases
- Glove boxes
- Process gases
- Furnaces
- Pharmaceutical

**Edgetech Instruments**

ISO/IEC 17025:2005 Accredited
ISO 9001:2015 Registered

# AcuTrak 1000

## Technical Specifications

**Dewpoint Ranges (Factory Settings)**

Standard AcuDew Ranges:

-80 to +20°C (-112 to +68°F)

-100 to 0°C (-148 to +32°F)

-120 to -20°C (-184 to -4°F)

Non-Standard AcuDew Ranges:

-110 to +20°C (-166 to +68°F)

-65 to +20°C (-85 to +68°F)

-100 to +20°C (-148 to +68°F)

**Operating Temperature Range:**

14°F to 140°F (-10°C to +60°C)

**Operating Relative Humidity:**

0 to 95% RH, non-condensing

**Input Power Supply:**

90 to 250 Vac 50/60 Hz OR 24 Vdc (factory set option)

**Output Power Supply For Connected Device:**

24 Vdc

**Power Consumption:**

AC: 10 VA, DC: 4 VA

**Isolation Voltage Test/Operation:**

2.3 KVac/250 Vac

**Display Response Time:**

0 to 90% or 100 to 10%, 0.4 seconds

**Wire Size:**

12 AWG max.

**Dimensions:**

(H x W x D) 2.835” x 5.57” x 4.57” (72 x 144 x 116 mm)

**Panel Cut-out Dimensions:**

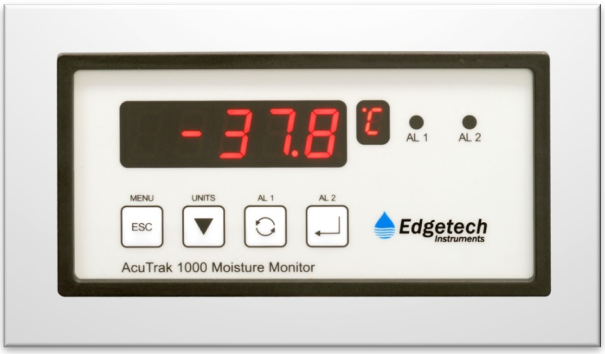
(H x W) 2.68” x 5.43” (68 x 138 mm).

**Ingress Protection:**

Front panel, NEMA 3 (IP54)

**Weight:**

16.6 oz. (470 grams)




**The AcuTrak 1000**

**Error Detection Indications:**

*rng L* - range low
*rng H* - range high
*open* - open circuit sensor
*short* - short circuit sensor
*err* - general error

**Signal Input:**

4 to 20 mA current loop

**Display:**

5-digit LED readout
Scrolled error display

**Signal Output:**

Programmable signal ranges: 0 to 20 or 4 to 20 mA dc (factory set)
Load: 20 mA max.

**Relay:**

Number of relays: 2, programmable
Relay function: setpoint
Deadband: programmable, 0.1 to 10°C dewpoint or equivalent
Max voltage: 250 Vac
Max current: 10 A
Max ac power: 2.5 kW
Max current at 24 Vdc: 15 A

**Serial Communications:**

Type: serial asynchronous, UART
Physical layer: RS485
Baud rate: 1200, 2400, 4800, or 9600

Toll Free: 800-276-3729 Ph: 978-310-7760 Fax: 978-310-7767
E-mail: H2O@edgetechinstruments.com
Web: www.edgetechinstruments.com


**Edgetech Instruments**
ISO/IEC 17025:2005 Accredited
ISO 9001:2015 Registered