

# DS1500 Dewpoint Hygrometer Display

Panel mounted.

NEW



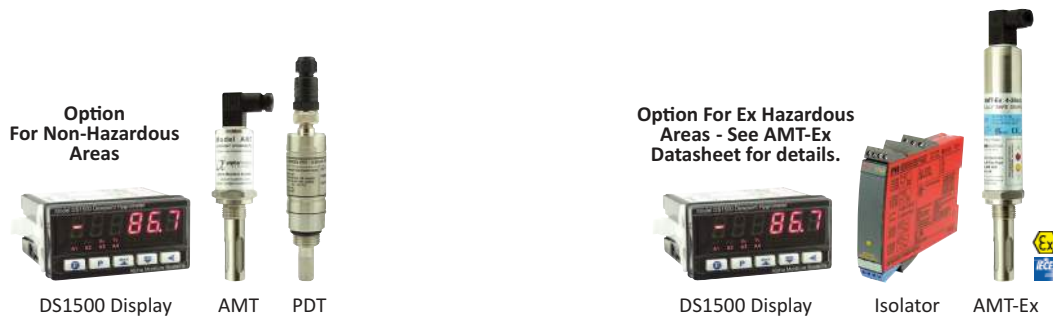
## Features and Benefits

- 💧 RS485 / MODBUS (RTU) serial communication enabled
- 💧 4 alarm relays – 2 x change over, 2 x normally open (NO)
- 💧 Compatible with AMT, PDT and AMT-Ex dewpoint transmitters
- 💧 Installed in the safe area unless housed in an Exd Enclosure
- 💧 Panel mounted single channel indicator
- 💧 Process Variable (PV) retransmission in 0-20 mA or 4-20 mA

The **DS1500** is a digital dewpoint hygrometer display and fully compatible with the Alpha Moisture Systems' **AMT**, **PDT** and **AMT-Ex** Dewpoint Transmitters for continuous trace moisture measurement in most gases and dry compressed air.

The **DS1500** system is factory configured to user specification to read in either °C dewpoint, °F dewpoint, ppm(v), ppb(v), g/m<sup>3</sup> or lbs/MMSCF. The measured value is displayed on a large six-digit red LED display.

**DS1500** offers a selectable 0-20 mA or 4-20 mA isolated retransmission signal and four programmable alarm relays.



Instrument configuration is achieved from the front keypad, without any hardware change. The selection of input type and alarm modes and other special functions, are also accessed and defined from the front keypad.

A digital communication channel is provided via a RS485 (MODBUS RTU Communication Protocol) serial connection for remote interrogation of measured values and status of alarms and instrument.

## Specifications

### DISPLAY - DS1500

Type:	Red 7-segment 6-digit primary display
Annunciators:	Alarms 1 to 4 status LEDs.
Power:	100 to 240 Vac/dc +/-10 %, 50/60 Hz

### RELAY OUTPUT 1 AND 2

Contact Type:	Single pole, changeover (SPDT)
Rating:	3 A resistive, 240 Vac, 50/60Hz (3 A / 30 Vdc Res.)

### RELAY OUTPUT 3 AND 4

Contact Type:	Single pole, changeover (SPST-NO:)
Rating:	1.5 A resistive, 250 Vac, 50/60Hz (3 A / 30 Vdc Res.)

### LINEAR (RE-TRANSMITTED) OUTPUT

Ranges Available:	0-20mA or 4-20mA linear in units selected
Accuracy:	±0.5% max of display value
Load Impedance:	500Ω max

## Specifications Continued

### SERIAL COMMUNICATIONS

Protocol:	MODBUS (RTU)
Data Format:	Number of databits: 8, without parity, and one stop bit.
Physical Layer:	RS485.
Maximum No. of addresses:	247.
Baud Rate:	Selectable – 1200, 2400, 4800, *9600, 19200, 38400 or 57600 bps. *Factory Default

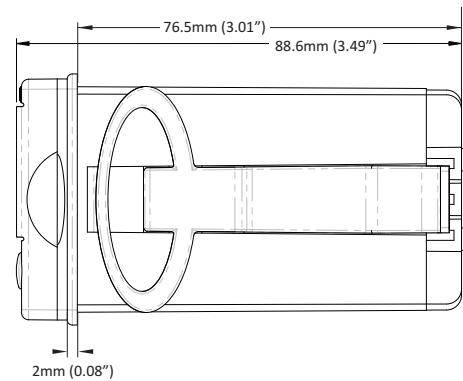
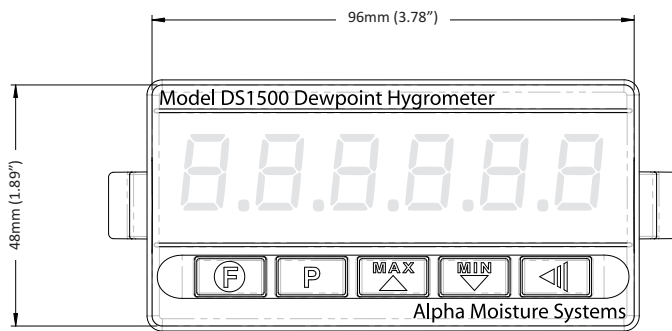
### ENVIRONMENTAL

Approvals:	CE
EMC:	Certified to BS EN61326-1
Safety:	Complies with BS EN 61010-1
Instrument Front Panel Seal:	To IP54

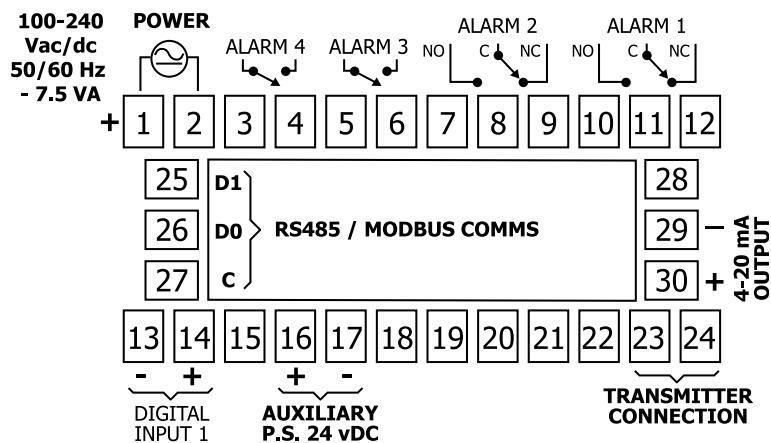
### PHYSICAL (CONTROL UNIT)

Operating Conditions	
Temperature:	5 °C to 50 °C
Relative Humidity:	0-90% non-condensing
Warranty	12 months in case of defective parts or faulty workmanship

## Dimensions and Electrical Connections



Panel Cut-Out Dimensions: 93mm (3.66") x 45mm (1.77")



## How to order

### Order:

## DS1500

(Display Only)

### To order a Dewpoint Transmitter - See relevant datasheet

AMT	Dewpoint Transmitter	Document Reference No.:	1869
PDT	Dewpoint Transmitter	Document Reference No.:	1769
AMT-Ex	Dewpoint Transmitter	Document Reference No.:	1722

Download PDF's from our website: [amsystems.co.uk](http://amsystems.co.uk)

## Related Products



### AMT

Used with DS1500  
in the safe area



### PDT

Used with DS1500  
in the safe area



### AMT-Ex

For Hazardous  
Applications



### Isolator

Used with AMT-Ex.  
Isolator and DS1500  
in the safe area

## Authorised Distributor Information

**Corrosive Gases:** The Sensor should not be exposed to corrosive gases (or corrosive contaminants in the gas sample) as these can chemically attack the sensor, impairing calibration accuracy and/or damaging it beyond economic repair. Examples of such gases are mercury (Hg), ammonia (NH<sub>3</sub>), chlorine (Cl<sub>2</sub>) etc. Strong oxidising agents such as ozone (O<sub>3</sub>) should also be prevented from coming into contact with the sensor.

3175 DS1500 pd040124-Iss-3

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Product specification may be subject to change.

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