

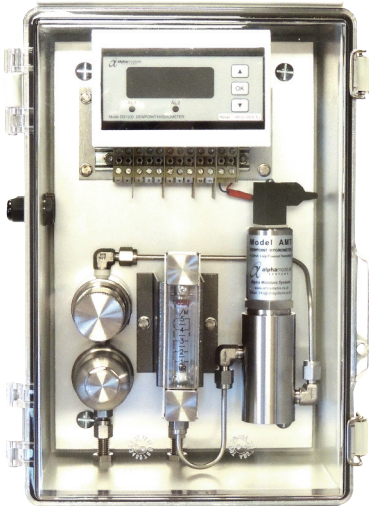
AMSS Custom Compact Dewpoint Sample Systems

Simplest solution to measure moisture content in a continuous gas or air flow

Features and Benefits

A typical basic AMSS Custom-Compact Dewpoint Sample System can consist of the following:

- 💧 4-20mA Display
- 💧 Dewpoint Transmitter (AMT with Automatic Calibration or a PDT Polymer Sensor)
- 💧 All Pipework and Fittings in high quality Stainless Steel
- 💧 Sealed Connection Glands
- 💧 316 Stainless Steel Sample Cell
- 💧 Pressure Regulator
- 💧 Isolation Valves
- 💧 Inline Filter Unit (coalescing or non-coalescing)
- 💧 Flow Meter (Up to 10 litres per minute)
- 💧 Rugged Polycarbonate Enclosure with clear or opaque lockable door. Door seal to IP67 (NEMA 6), or all high grade stainless steel.



DS1200-AMT
Sample System



PDT-DIS030
Round Display
(Local)
Hygrometer



DS1200-PDT
Hygrometer

The AMSS Wall Mounted Custom-Compact Sample System Range are engineered solutions for extracting and analysing a representative sample of the process gas or air, which is then either vented to atmosphere or returned to the process.

The wall mounted sampling systems range have been specifically designed to condition pressurised gas or air samples up to 200 barg maximum ready to measure the moisture levels from a constant and consistent flow.

Simply connect to a power source and sample gas, regulate the pressure and flow through the instrument for rapid/accurate dewpoint measurements.

The AMSS Custom Compact Sampling Systems are made to order to exact customer requirements and will need little or no maintenance.

Specifications for DS1200-AMT Dewpoint Hygrometer Arrangement Example

DS1200 DISPLAY INDICATOR:

ENCLOSURE	1/8 DIN panel mounting ABS case
DISPLAY:	4 digit, 14 segment LED indicator. Red characters 13.8mm high. Factory set to display in °C, °F, ppm(v), ppb(v), g/m ³ or lbs/MMSCF
SUPPLY VOLTAGE:	Universal 22 Vac - 253 Vac 50/60 Hz & 20 Vdc - 300 Vdc 150 mA to 15 mA
POWER CONSUMPTION:	3.5W Maximum
OUTPUT SIGNAL:	Linear 4 to 20 mA, fully isolated. Maximum load 800 Ω / 16 Vdc
ISOLATION:	Voltage Test / Operation - 2.3 kVac / 250 Vac
ALARM RELAYS:	2 independent fully programmable switched contacts. Rated 2A @ 250Vac / 1A @ 24Vdc.
ANNUNCIATORS:	AL1 & AL2 LED's on front panel indicating status of each alarm
ELECTROMAGNETIC COMPATIBILITY (EMC):	Complies with BS EN 61326-1
WEATHERPROOF CLASSIFICATION:	Front panel only - IP65 (NEMA 4X).
WEIGHT:	230 grams

AMT TRANSMITTER & GENERAL SPECIFICATIONS:

SENSOR TYPE	Model AMT Dewpoint Transmitter
SENSING ELEMENT:	Ultra High Capacitance - Aluminium Oxide Type

RANGES:	Available between -120°C to +20°C (-84°F to +68°F) dewpoint
AUTOCAL:	Field calibration / Span check facility. Activated and operated via two button switches on the Transmitter body. Locked in normal operating mode to avoid tamper.
TRANSMITTER ENCLOSURE:	316 Stainless steel body with size C, DIN EN 175301 connector.
SENSOR PROTECTION:	316 Sintered stainless steel filter - 50 micron
OPERATING PRESSURE:	From 1kPa (0.01 barA) to Maximum 35,000kPa (350 barA)
SAMPLE FLOW RATE:	Flow independent but ideally 2 to 5 standard litres per minute. Max: 25 litres/min
WEATHERPROOF CLASSIFICATION:	IP66 / NEMA4X when Connector mated to Transmitter.
MECHANICAL CONNECTION:	3/4" UNF (16tpi) with integral Viton "O" ring seal.
WEIGHT:	Transmitter and connector - 175grams
CABLE:	Supplied with 2m length standard two core cable. Nominal diameter 3.4mm, 92ohms/km at 20°C
ELECTROMAGNETIC COMPATIBILITY (EMC):	Complies to BS EN 61326-1
TEMPERATURE COEFFICIENT:	Transmitter temperature compensated for operating range.
REPEATABILITY:	Better than ±0.3°C dewpoint
FACTORY CALIBRATION:	Supplied with Certificate of Calibration traceable to NPL / NIST
ACCURACY:	± 2°C dewpoint (NPL / NIST traceable for range -90°C to +20°C)
OPERATING TEMPERATURE: -	20°C to +60°C
STORAGE TEMPERATURE:	-20°C to +70°C
OPERATING HUMIDITY (External):	Maximum - 95% RH Non-condensing
WARM UP TIME:	10 seconds
MECHANICAL WARRANTY:	24 months in case of faulty workmanship and defective parts.
CALIBRATION WARRANTY:	12 months (not valid if transmitter is subject to corrosives or mis-use)

* For PDT Dewpoint Transmitter See Datasheet For Full Specifications.

Dewpoint Sensor Options



AMT Aluminium Oxide Dewpoint Transmitter, 2 wire connection, 4-20mA. Ranges available between -120 °C to +20 °C (-84 °F to +68 °F) dewpoint

PDT Polymer Sensor Dewpoint Transmitter, 2 wire connection, 4-20mA. Ranges available between -60 °C to +50 °C (-76 °F to +122 °F) dewpoint

Closed Cabinet Options

Lockable Door Closure Options on Polycarbonate and Stainless Steel Enclosures



Clear Door Options

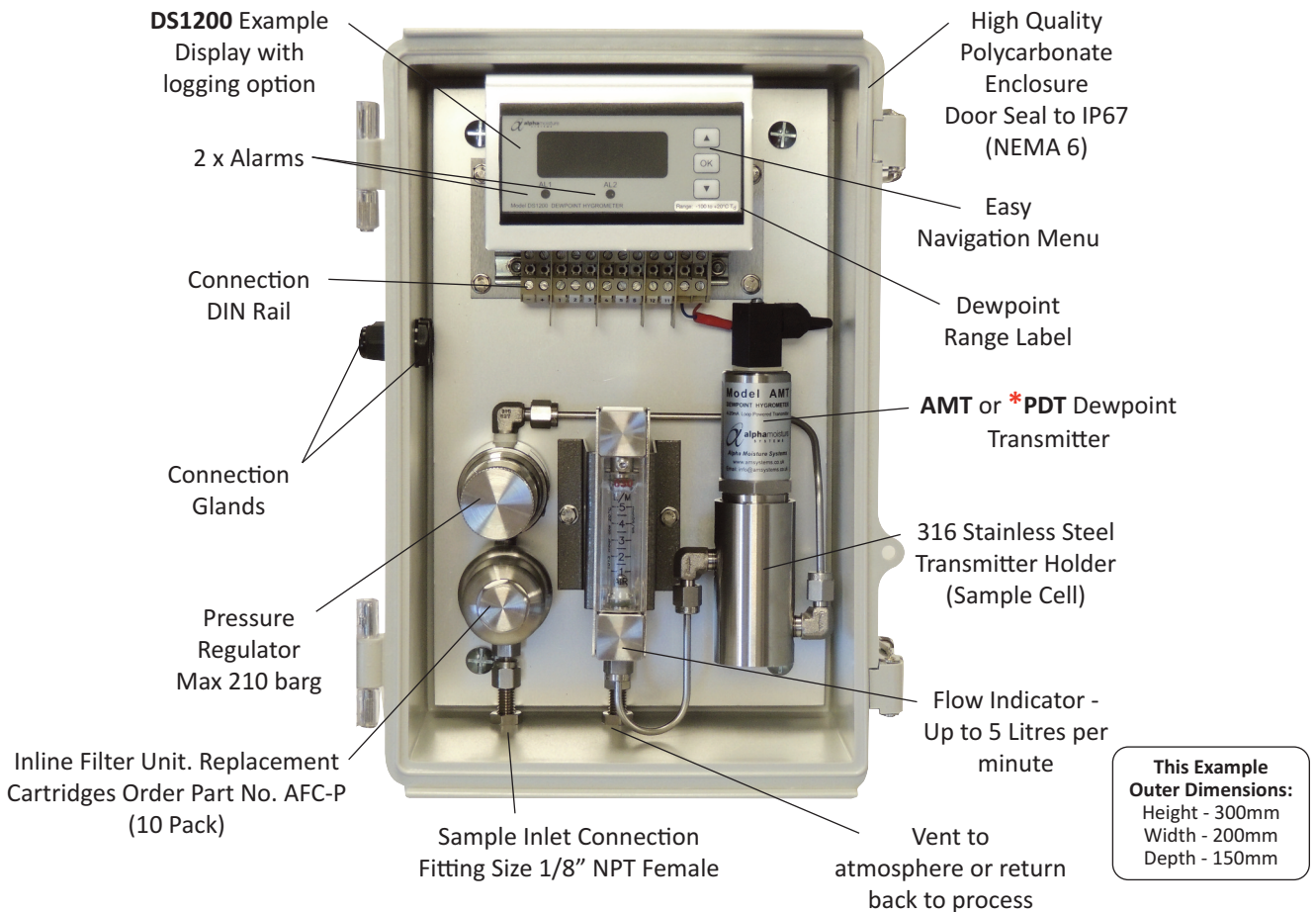


High Grade all Stainless Steel Enclosure Options



Specifications for DS1200-AMT Dewpoint Hygrometer Arrangement Example

Arrangement Example



How to order

To order a **AMSS Custom-Compact Dewpoint Sample System**, please contact us directly to discuss your exact requirements with our highly experienced Technical Department on **+44 (0)1274 733 100** or email **info@amsystems.co.uk**

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 (NH₃), chlorine (Cl₂) etc. Strong oxidising agents such as ozone (O₃) should also be prevented from coming into contact with the sensor.

3000 Custom Sample Systems pd130423-ISS 2

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Product specification may be subject to change.