

Advanced Dew Point Hygrometer

SPECIFICATION SHEET

Medical Gas Check MDM300

Portable, fast and accurate moisture content analysis in the field.

Simple-to-use monitor, capable of performing more measurements per hour than any other comparable hydrometer.

Features

- User-friendly software and menu-driven display
- Portable and user friendly
- Rugged design
- Repeatedly fast measurements
- Measurement parameters at the touch of a button
- External device input for dew-point, temperature and pressure transmitters
- · Bluetooth connection for trouble-free data download
- Built-in sampling system up to 300 bar, with external options up to 400 bar
- Lightweight less than 1.5kg
- IP66/NEMA 4 rated, making it ideal for demanding outdoor applications.

Applications

• Hospital piped gases.



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Advanced Dew Point Hygrometer CONTINUED

Specification

Power supply

Measurement technology:		Ceramic sensor
Accuracy: ±1°C	from -60 to +20°C dew-point, ±2°C from -100	to -60°C dew-point, ±0.2°C temperature
Measurement range:	Calibrated -100/+20°C dew-point, Readings to +30°C dew point	
Measurement units:	Dew-point:	C, °F, K for dew-point
	Air (N2, H2, CO2, SF6):	pmv, ppmw
	Gas temperature:	%RH, gm-3, gkg-1
	Active pressure option:	bara/g, psig, MPa, KPa
Resolution (display):	0.1 for all dp derived units (autoranging where appropriate, e.g. ppm)	
Resolution (measurement):	0.01°C dew point	
Typical response speed:	T95 in ≤10 minutes to -70°C	
Measurement system repeatability:	Better than 0.1°C	
Measurement system stability:	0.1°C	
Measurement system hysteresis:		0.05°C
Electrical input/output		
Auxiliary Inputs:	4-20mA loop-powered external input for dew point, temperature and pressure	
Battery type:	Internally mounted NiMH 4.8V	
Battery operating life:	Typically over 48 hours during use (intelligent charger supplied)	
Operating conditions		
Operating pressure range:	<300 bar (<400 bar with external sampling system and pressure regulator)	
Operating environment Outdoors:	0-100% (RH condensing)	
Storage/transport temperature:	7/////	-40°C to +70°C
Mechanical specification		
Display:		Blue LCD graphical display
Enclosure type:	S	Steel fibre-loaded high-impact polyamide 6
IP/NEMA rating:	IP66/NEMA 4	
Gas connections:	½" NPT female (other options available)	
Flow across sensor:	0.2-2.0 NI/min	
Filters:	50 micron stainless steel sinter in inlet port (other porosities available)	
Gas wetted materials:	AISI 316L stainless steel	
Dimensions (H \times W \times D):		90 × 170 × 218mm
Weight:		1.3 kg
General		
Data logging:	8 megabytes (log interval: 5-60 seconds; logs per log file: <10,000)	
Communications:	(Wireless) Bluetooth TM range up to 5m (version 2.0)	

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