

Easidew Portable

Portable Universal Hygrometer

Simple to use and rugged, the Easidew portable hygrometer is the ideal tool for a wide range of on-site maintenance spot checks and dry dew-point online measurements. The robust integral sample system and wide measurement range ceramic moisture sensor provide an accurate moisture measurement in a broad range of dew-point applications.



Highlights

- Spot-check measurements to -60°C (-76°F) dew point
- 16 hours operation between recharging
- Sample at pressure or atmospheric
- Accuracy $\pm 2^{\circ}\text{C}$ ($\pm 3.6^{\circ}\text{F}$) dew point
- Traceable 13-point calibration certificate
- Rugged industrial design
- Compact and simple to use
- Sample connection kits
- Online moisture measurements -100 to $+20^{\circ}\text{C}$ (-148 to $+68^{\circ}\text{F}$) dew point

Applications

- Compressed air
- Gas generators
- Railway pneumatics
- Plastic molding dryers
- Additive manufacturing
- Instrument air

Easidew Hygrometer

The Universal Moisture Portable

The Easidew Hygrometer has been designed to make dew-point spot checks down to -60°C (-76°F) dew point, and online measurements across -100 to +20°C (-148 to +68°F) dew point, as simple as possible. This completely self-contained instrument weighs just 4kg (8.8 lb) and is delivered ready to use. Simply connect your sample gas to the Quick Connect (or optional Swagelok®) fittings, turn on the instrument and it will begin to measure/display the dew point of the applied sample.

Extended Field Use

The Easidew uses a rechargeable NiMH battery pack and is delivered complete with a universal battery charger that fits neatly into the instrument lid. It will operate for up to 16 hours on a full charge.

Fully Integrated Sampling System

The Easidew is unique among portable hygrometers. Michell Instruments has built into the standard design, a complete sampling system that easily allows you to measure the dew point of any air or gas line, at up to 2 Mpa (20 barg/290 psig) pressure. The two interchangeable inlet/outlet fittings allow you to choose between dew point measured at atmospheric or line pressure, by simply swapping the position of the fittings. An integrated filter housing uses standard filter cartridges and provides 99.5% protection against particles down to 0.3µm. Optionally, Swagelok® tube couplings can be specified to allow operation of the unit at up to 30 Mpa (300 barg/4351 psig).

Measurement Performance

The transmitter uses Michell’s market-leading ceramic measurement technology coupled with the latest-generation, sophisticated microcontroller electronics to provide accurate and stable measurement across the product life of the transmitter.

- Accuracy ±2 °C (±3.6°F) dew point
- Excellent long-term stability



Field Replaceable Integral Sensor

The advanced ceramic moisture-sensing technology is coupled with the latest microprocessor-based measurement circuitry to produce a 13-point traceable calibrated and interchangeable sensor transmitter module. All calibration data is stored in the sensor memory, so on-site sensor exchange for calibration or service can be performed quickly, by untrained personnel.

Easy to Read

The hygrometer features an extremely clear and bright 0.5" red LED display, making it easy to determine the dew point of your process even in dim conditions or direct sunlight. Michell also provides a 4–20 mA analog output for connection to a chart recorder, data-logger or computer system, so dew-point trends can be analyzed over time.

Rugged Field-Use Design

The Easidew is rugged, and easy to carry and use. It is small, with an ergonomic carrying handle, and weighs only 4kg (8.8 lb). The case of the hygrometer provides NEMA 6 protection and the outer case is covered by a lifetime guarantee, so can be returned to the factory for repair or replacement, free of charge.

Reproducibility and Calibration Integrity

The Easidew advanced ceramic moisture sensors are subject to a 13-point calibration, where their performance is characterized against a fundamental reference hygrometer. This process, and subsequent quality testing, ensures that all sensors behave optimally before they are used in the field.

Traceable Calibration

Each Easidew is supplied with a calibration traceable to national standards (NPL & NIST) from Michell Instruments’ accredited laboratory.

Accessories and Spares

The Easidew is available with a supporting range of practical accessories and spares that can be stored within the lid of the portable, whilst being used on site:

- Connector fittings
- Filters
- Guards
- Tubing
- Battery pack
- Charger

Customization

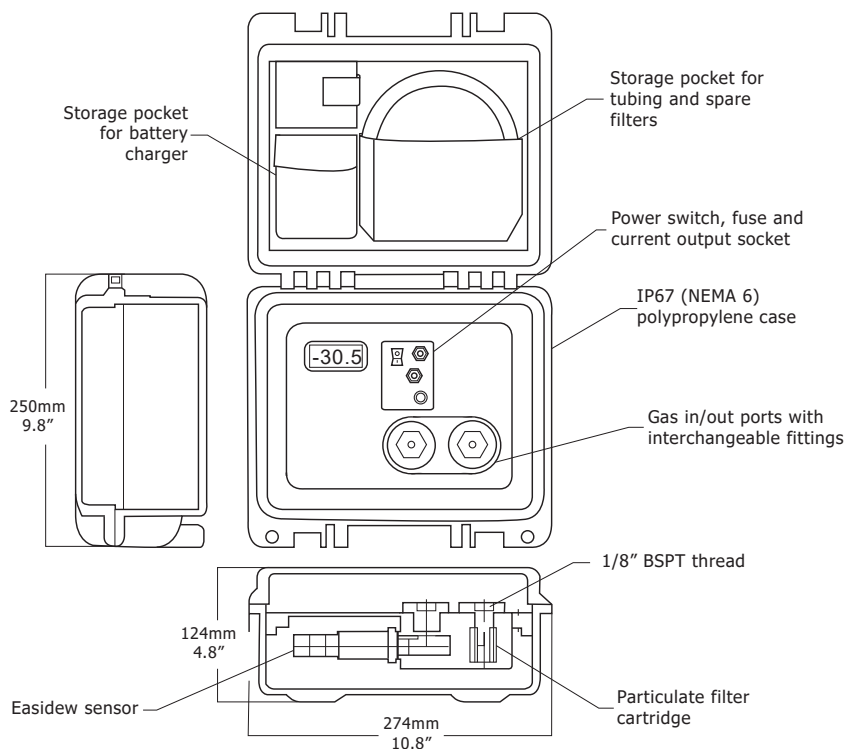
If your application requires a customized portable, we have specialized design and manufacturing capability to cover your requirements.

Technical Specifications	
Performance Specifications	
Measurement Range (Non-standard ranges available on request)	Spot-checking: -60 to +20 °C (-76 to +68 °F) dew point Online monitoring: -100 to +20°C (-148 to +68 °F) dew point
Accuracy	±2 °C (±3.6 °F) dew point
Repeatability	0.5 °C (0.9 °F) dew point
Calibration	13-point calibration certificate traceable to national standards
Electrical Specifications	
Output Signal	User configurable over range; 4–20 mA (2-wire connection, current source)
Moisture Display/Output	Dew point
Power Supply	Rechargeable NiMH battery pack with 16-hour life from full charge
Battery Charger	Universal battery charger included
Electrical Safety	EN61010-1
Operating Specifications	
Operating Temperature	-20 °C to +50 °C (-4 to +122 °F)
Compensated Temperature Range	-20 °C to +50 °C (-4 to +122 °F)
Storage Temperature	-20 °C to +60 °C (-4 to +140 °F)
Maximum Operating Pressure Low-pressure version (LP) High-pressure version (HP)	2 MPag (20 barg/290 psig) 30 MPag (300 barg/4351 psig)
Recommended Flow Rate	1 to 5 NI/min
Sampling System Configuration	Pressurized or atmospheric
Mechanical Specifications	
Ingress Protection	NEMA Type 6*
Display Type	Flush mounted 3.5 digit red LED
Carry Case	Yellow Peli propylene case with internal storage of charger, sample tube accessories and output connector
Weight	4kg (8.8 lb)
Sample Block	Stainless steel, fully self-contained sample system with fixed orifice ports for flow control/pressure or atmospheric measurement and built-in filtration using a standard drop-in cartridge
Filter Cartridge	Removes 99.5% of particles ≥0.3µm supplied with cartridge installed. Spare cartridges are available
Sample Connections	Optional: Legris pneumatic fittings 6mm Swagelok® tube fittings 1/4" Swagelok® tube fittings
Sample Tubing Low-pressure version (LP) High-pressure version (HP)	2m (6.5 ft) of 6mm (1/4") O/D PTFE supplied Metering valve and port adaptor

NOTES * NEMA Type 6 when case closed

Easidew Hygrometer

Product Dimensions



Related Industrial Products



Easidew Tx
Industrial Dew-Point Transmitter



SF82
Industrial Dew-Point Transmitter



MDM50 Portable
Hygrometer



MDM300
Dew-Point Hygrometer



Easidew Online
Dew-Point Hygrometer



Senz-TX
Oxygen Sensor Transmitter



YellowBox Portable
Portable Oxygen Analyzer



Optidew 501
Chilled Mirror Hygrometer

Michell Instruments Ltd, Rotronic Instruments Corp. 135 Engineers Road, Suite 150, Hauppauge NY 11788

Tel: 631 427 3898, Email: us.info@michell.com, Web: www.michell.com/us

Michell Instruments adopts a continuous development programme which sometimes necessitates specification changes without notice.

Issue no: Easidew Portable_97157_V5.1_US_0620