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 metal-oxide moisture sensor provide an accurate moisture measurement in a broad range of dew-point applications.

**Highlights**
- Spot-check measurements to -60°C dew point
- 16 hours operation between recharging
- Sample at pressure or atmospheric
- Accuracy +/-2°C dew point
- Traceable 13-point calibration certificate
- Rugged industrial design
- Compact and simple to use
- Sample connection kits
- Online moisture measurements -100 to +20°C dew point

**Applications**
- Compressed air
- Gas generators
- Railway pneumatics
- Plastic moulding 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 dew point, and online measurements across -100 to +20°C dew point, as simple as possible. This completely self-contained instrument weighs just 4kg 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) 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).

Measurement Performance

The transmitter uses Michell’s market-leading ceramic metal-oxide 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 dew point
- Excellent long-term stability

Field Replaceable Integral Sensor

The ceramic metal-oxide 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. 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 ceramic metal-oxide 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 | Spot-checking: -60 to +20 °C dew point  
<table>
<thead>
<tr>
<th>(Non-standard ranges available on request)</th>
<th>Online monitoring: -100 to +20° C dew point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>±2 °C dew point</td>
</tr>
<tr>
<td>Repeatability</td>
<td>0.5 °C dew point</td>
</tr>
<tr>
<td>Calibration</td>
<td>13-point calibration certificate traceable to national standards</td>
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</tbody>
</table>

### 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 |
| Compensated Temperature Range | -20 °C to +50 °C |
| Storage Temperature | -20 °C to +60 °C |
| Maximum Operating Pressure | 2 MPag (20 barg)  
Low-pressure version (LP)  
High-pressure version (HP)  
30 MPag (300 barg) |
| Recommended Flow Rate | 1 to 5 Nl/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 |
| 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 | 2m of 6mm O/D PTFE supplied  
Metering valve and port adaptor |

* 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
Dew-Point 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