Hydro-Mix HT
High Temperature

120°C
Hydro-Mix HT

High temperature, flush mount, digital moisture sensor

The Hydro-Mix HT has been designed to be installed in drying, ducting, conveying and mixing systems in process control environments where the operating temperature is high.

Reading at 25 times per second and combined with on-board functionality such as signal processing, smoothing and averaging, the Hydro-Mix HT accurately measures the moisture content of material as it passes over the ceramic faceplate. Remote configuration, calibration, diagnostics and firmware upgrades are simple using Hydronix Hydro-Com software. The linear output allows direct integration with any control system using industry standard interfaces.

Features

• Continuous process temperature up to 120°C.
• Digital measurement technology provides precise linear moisture measurement with 25 readings per second.
• Advanced Digital Signal Processing provides a clear signal with rapid response.
• Choice of measurement modes for optimising sensor performance in a variety of applications and material types.
• Fully temperature compensated measurement.
• Two analogue outputs, digital RS485 communications and configurable digital inputs/output, alarms.
• Remote communication with Hydro-Com software allows configuration of all sensor parameters.
• Consistent performance with no need for recalibration except for use with different materials.
• Calibration data points stored within the sensor for improved quality control.
• Stand alone or simple integration into a new or existing system.

Installation

Adjustable fixing system for flush mounting.
Integration Options

A combination of up to 16 Sensors can be connected on the RS485 network

Display and Control Options
Hydronix has a range of display and control options

Configure and Calibrate
Easily configure and calibrate the sensor using Hydro-Com Software
# Technical Information

## Construction
- **Body**: 316 Stainless Steel (Food Safe).
- **Faceplate**: Ceramic (Food Safe).
- **Internal Seals**: FDA Approved O-Rings.

## Fixing
The sensor is flush mounted with the internal wall of the installation using the included mounting assembly.

## Measurement Range
- **Moisture**: 0-100%, material dependant.
- **Depth**: Approx. 75-100mm, material dependant.

## Operating Temperature
- **Process**: Continuous 0-120°C. Intermittent: 120-130°C ≤ 10 minutes.
- **Ambient**: 0-60°C.

## Refresh Rate
- 25 times per second

## Analogue Outputs
- Two configurable 4-20mA or 0-20mA current loop source available for moisture and temperature. May also be converted to 0-10V DC.

## Digital Inputs/Output
- Two configurable digital signals available for averaging and alarm functions.

## Digital (Serial) Communication
- Opto-Isolated RS485 2-wire port.
- RS232 converter, Ethernet and USB interfaces available.
- Programming details to access sensor values and parameters are available on request.

## Power Supply
- +15V to +30V DC, 4W.

## Extension Cable
- Six twisted pairs, 22AWG, 0.35mm² conductors. Screen braid with 65% minimum coverage plus aluminium/polyester foil. Maximum cable run of 100m

## Concrete Equipment Group, LLC

---

### Part Number | Description
--- | ---
HMHT-01 | Hydro-Mix HT Digital Microwave Moisture Sensor
4010 | HMHT Fixing Plate (provided with sensor)
4020 | HMHT Clamp Ring (provided with sensor)
0975A | 4m Sensor Cable with military specification sensor connector
0116 | Power Supply 30 Watt for up to 4 sensors
0049A | RS232-485 Converter - DIN rail mounting
0049B | RS232-485 Converter - 9 pin D-type to terminal block
SIMxx | USB Sensor Interface Module including cables and power supply
EAK01 | Ethernet Adapter Kit
EPK01 | Ethernet Power Kit
HTEW | 4 Year extended warranty option

---

Note: Information given is correct at the time of publication. Hydronix reserve the right to modify and change the specification as deemed appropriate without notification.

Hydronix, Hydro-View, Hydro-Probe, Hydro-Mix and Hydro-Control are Trade Marks of Hydronix Limited.