

**Kett**

SCIENCE OF SENSING

# HI-520-2

## Concrete and Mortar Moisture Tester



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The HI-520-2 concrete and mortar moisture tester can measure moisture contents by simply placing the moisture sensor against objects to be measured thanks to the introduction of high-frequency capacitance method for measurement.

In addition to the functions of the conventional type, "HI-520", which has been widely used in the industry, this product has an enlarged screen with embedded backlight, and ergonomically redesigned housing and switches, i.e. HI-520-2 has become a more user-friendly instrument.

This product displays moisture content (%) by selecting a material from 6 kinds that are stored in advance and displays a high-frequency capacitance with a value ranging from 0 through 1999, which is correlated with the amount of moisture.

This moisture tester can be used by a wide variety of users including: construction sites such as water proofing, interior finishing, and painting; In quality control at building material manufacturing; at research institutions for product development.

### • Compact, lightweight, and hand-held

Moisture measurements of a variety of applications can be easily and securely performed with just one hand. Simply turn on the power, point the moisture sensor into the air, and then push it against an object. The moisture content is immediately displayed on the screen



### • Backlit integrated LCD

This product has a larger screen as compared with the original HI-520, and the integration of a backlight allows the user to readily measure moisture contents in the dark.

### • User calibration creation function

The creation of user calibrations allows even moisture contents of materials not included in the target objects of this unit to be controlled. Up to 8 pieces of calibrations can be stored. After the user calibration is created, the measured data can be downloaded to a PC with use of the optional data logger software, "HDL-01".

### • Moisture content and high-frequency capacitance displayed

The D mode measurement displays a value ranging from 0 through 1999, which is correlated with high-frequency capacitance. The S mode measurement that is introduced in this unit also displays a value ranging from 0 through 1100, which is correlated with a high-frequency capacitance, for measuring moisture content at relatively shallower points.

### Specifications

|                       |  |
|-----------------------|--|
| Measuring principle   | High frequency capacitance (20MHz)   |
| Applications/Ranges   | LWC (ALA : Artificial lightweight aggregate concrete)..... 0-23 %<br>GYP (Gypsum board) ..... 0-50 %<br>Concrete..... 0-12 %<br>ALC (Autoclaved lightweight concrete)..... 0-100%<br>Mortar ..... 0-15 %<br>CSB (Calcium silicate board)..... 0-15 %<br>D mode..... 0-1999<br>S mode (only in S & D mode) ..... 0-1100 |
| Functions             | Temperature correction, backlight, upper limit of moisture content alarm setting, hold, user calibrations (8 pcs.)   |
| Display               | Digital (LCD)  |
| Power supply          | 9 V alkaline battery (006P) ×1   |
| Power consumption     | 350 mW   |
| Dimensions and weight | 72 (W) × 146 (D) × 118 (H) mm, approx. 0.39 kg   |
| Accessories           | 9 V alkaline battery (006P), soft case (with strap), operating manual  |
| Options               | Data logger software HDL-01 (with USB cable)   |

### Applications/Modes and Functions

|                  | Applications/<br>Modes    | Temperature<br>compensation | Alarm | Hold | Thick<br>board<br>selection | Data<br>save/<br>output | Registration<br>of<br>calibrations |
|------------------|---------------------------|-----------------------------|-------|------|-----------------------------|-------------------------|------------------------------------|
| Normal functions | LWC (ALA)                 | ○                           | ○     | ○    | —                           | —                       | —                                  |
|                  | GYP                       | ○                           | ○     | ○    | ○*1                         | —                       | —                                  |
|                  | Concrete                  | ○                           | ○     | ○    | —                           | —                       | —                                  |
|                  | ALC                       | ○                           | ○     | ○    | —                           | —                       | —                                  |
|                  | Mortar                    | ○                           | ○     | ○    | —                           | —                       | —                                  |
|                  | CSB                       | ○                           | ○     | ○    | ○*1                         | —                       | —                                  |
|                  | D mode                    | —                           | —     | ○    | —                           | —                       | —                                  |
| Others           | S & D (D mode,<br>S mode) | —                           | —     | ○    | —                           | ○*2                     | —                                  |
|                  | User Cal (0 - 7)          | —                           | —     | ○    | —                           | ○*2                     | ○*3                                |

\*1 Thick board is selectable for GYP and CSB.

\*2 The data logger software, "HDL-01", (option) and a Windows PC with Excel installed are needed.

\*3 The use of data logger software, "HDL-01", (option) allows users to simply make user calibrations.



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Management System Enhancement Department of the Japanese Standards Association (JSA) registers the Quality Management System of the above organization, which conform to JIS Q 9001, ISO 9001. The Scope of the Registration.

Design, development and production management of Moisture Testers, NIR Composition Analyzers, Grain Inspectors and Coating Thickness Testers. Calibration and repair of Moisture Testers, NIR Composition Analyzers, Grain Inspectors and Coating Thickness Testers.

### Requests