

SMARTi

iMoist

Contactless Moisture Sensors

iMoist sensors are high precision contactless moisture measurement systems. Sensors support longitudinal and transversal scanning, depending on the required production configuration. They represent a valuable addition to SMARTi scanners when integrated together. Moisture content of individual boards is synchronized with results from scanning process. Combined with SMARTi iCon X-Ray machine, moisture measurement is used as a vital information for strength grading applications.



Connected Solutions

Contactless moisture measurement technology supporting accurate and high speed applications. When integrated together with SMARTi scanners, data synchronization and strength grading are made possible from a single connected solution.



- » Integration with SMARTi scanners
- » Linear speed up to 1200 m/min
- » Transversal speed up to 300 boards/min
- » 0.1% moisture content resolution
- » Longitudinal and transversal moisture measurement

Longitudinal Measurement

Longitudinal contactless moisture measurement configuration for boards up to 150 mm in thickness. When used for strength grading in combination with SMARTI iCon X-Ray scanner, one moisture sensor is required.



Transversal Measurement

Transversal contactless moisture measurement configuration with multiple sensors synchronized together. When used for strength grading in combination with SMARTI iCross X-Ray scanner, each pointwise x-ray station requires individual moisture sensor.



Specifications

Use Cases

- » Moisture sorting
- » Strength grading
- » Integration with SMARTI scanners

Capabilities

- » Contactless moisture measurement (%)
- » Board thickness longitudinal - up to 150 mm
- » Board thickness transversal - more than 150 mm

Measurement

- | | |
|---|---|
| » 0.1% moisture content resolution | » Average board moisture (%) |
| » 0.2% moisture content accuracy | » High peak board moisture (%) |
| » Frequency - 500 Hz | » Low peak board moisture (%) |
| » 2% - 30% moisture range / dry measurement | » Segmented board moisture (%) for strength grading |
| » 30% - 250% moisture range / wet measurement | |

Technology

- » Frequency penetration

Software

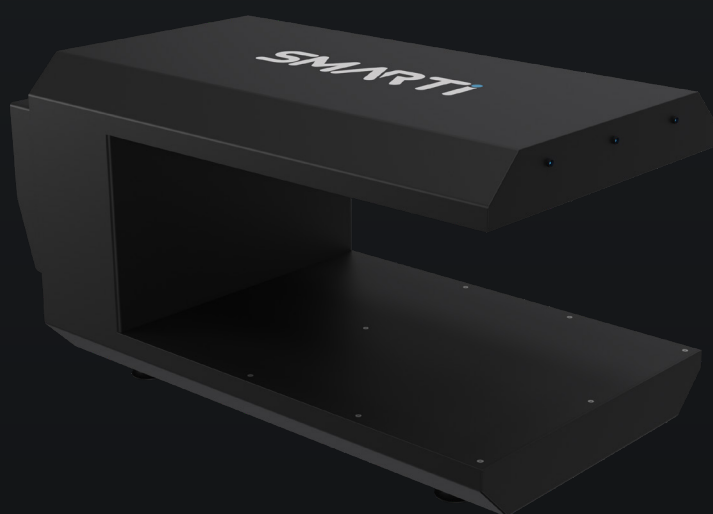
- » Integration in SMARTI scanner UI
- » Adjustable parameters
- » Adjustable outputs

Models



iMoist T100

- » Longitudinal
- » Board thickness up to 100 mm
- » Contactless
- » 0.1% moisture content resolution
- » Speed up to 1200 m/min



iMoist T150

- » Longitudinal
- » Board thickness up to 150 mm
- » Contactless
- » 0.1% moisture content resolution
- » Speed up to 1200 m/min



iMoist C400

- » Transversal
- » Measurement range - 400 mm
- » Contactless
- » 0.1% moisture content resolution
- » Speed up to 300 boards/min



iMoist C600

- » Transversal
- » Measurement range - 600 mm
- » Contactless
- » 0.1% moisture content resolution
- » Speed up to 300 boards/min

Empowering Wood Industry

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