- Online Data Management System for Packaging Testing-The ultimate cloud computing technology for test data processing and management
- Designed with embedded computer control system and intelligent operating software
- Can be used to test shrinking force, contracting force and shrinkage ratio of heat-shrinkable films

Labthink

Online data management system for packaging testing

Comes with two versions to meet distinct needs of our clients:

The Cloud Version

- Consist of 6 functional modules: Test Management, Target Management, Instrument Management, File Management, Settings, and Online Support
- Cloud services: storage, calculation, and analysis of mass test data
- Automatically upload original test data to the cloud server to guarantee data security
- Intelligent statistical analysis of test results
- Easily accessible through the internet on PCs, laptops, mobile phones, and other devices anywhere and anytime, to check and review real time test results and historical test reports, as well as analytical graphs and statistical information

The Intranet Version

- Featured with storage space for vast data, correlation analysis, trend analysis, and statistical analysis of test data, as well as report printing and data export functions
- Easily accessible via computers through Intranets
- "One Click Upgrade" to the powerful "Cloud Version"



Functionality

- Three groups of specimens can be tested simultaneously
- High-precision load cell and displacement transducer are used for accurate determination of thermal parameters
- Shrinking force, contracting force and shrinkage ratio and are displayed in real time
- Professional software supports test result assessment and instrument usage rate or test frequency analysis
- Intelligent reminder for sensor calibration and recording of operation guarantee a safe test environment
- Viewing and printing of historical data are available in this instrument

Design

- Embedded computer control system provides safer and more reliable data management as well as test operation.
- The instrument can be easily operated with a mouse, a keyboard, and a monitor, without requiring a PC.
- The instrument is equipped with four USB ports and dual Internet ports for convenient data transmission.
- Sophisticated energy consumption and test environment monitoring and analysis functions for better test accuracy and reliability. (Relevant sensors are needed. For more information, please refer to the configuration in Technical Specifications.)

Software

- Interface: Windows-based operating interface
- Statistics: easy calculation for historical results, instrument usage, energy consumption, and large statistical information
- Test Report: can provide detailed test reports in various customized patterns
- Energy Consumption and Test Status Monitoring (Additional Sensors Required): the system monitors and displays real-time voltage, current, energy consumption of instrument as well as ambient temperature and relative humidity during the test, which serves to evaluate test data reliability
- User Management: multi-level account management for better data management and protection
- Operation Log: system automatically records all the operations by the user, which is easy to review

Test Principle

- Specimens connected to load cells or displacement transducers are rapidly brought up to the shrinkage temperature, then cooled in the open air to a specified temperature. During this process, the system records the real-time temperature, shrinking force, contracting force and shrinkage ratio and conducts analysis for test results.
- This instrument conforms to the following standards: ISO 14616-1997, DIN 53369-1976

Applications

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Labthink®

This instrument can be used to test the following materials:

	Shrinking Force and	Test the shrinking or contracting force of heat-shrinkable films at	
Basic	Contracting Force	specified test conditions	
Applications	Shrinkage Ratio	Test the shrinkage ratio of heat-shrinkable films at specified test	
		conditions during the heat shrinkage test	

Technical Specifications

	Capacity Range	0.2 ~ 30 N (Standard)	
		Customization Available	
	Force Accuracy	±0.2%	
	Displacement Range	0.125~70 mm	
Test Specs	Displacement Accuracy	±0.125 mm	
	Test Temperature	Room temperature $\sim 210^{\circ}$ C	
	Accuracy	±0.5°C	
	Number of Specimens	1~3 groups	
	Specimen Size	130 mm × 15 mm (Standard)	
	Voltage Monitoring Range	AC 0 ~ 250 V, with $\pm 0.5\%$ accuracy	
	Current Monitoring Range	$0 \sim 15$ A, with ±0.5% accuracy	
Environment	Energy Analysis Accuracy	±0.5%	
Monitoring Specs	Environmental Temperature		
(Optional)	Monitoring Range	-10 °C ~ 55 °C, with ± 0.1 °C accuracy	
	Environmental Humidity	$0 \sim 100\%$ RH, with ±2% RH accuracy	
	Monitoring Range		
	Gas Supply	Dry air (outside of supply scope)	
	Port Size	Φ6 mm PU Tubing	
Other Specs	Power Supply	AC 110 V 60 Hz	
	Instrument Dimension	735 mm (L) x 490 mm (W) x 391mm (H)	
	Net Weight	68 kg	
		Mainframe (including Wireless Data Interface),	
	Standard	Professional Software, LCD Monitor, Keyboard, Mouse,	
		Sampling Template (15mm)	
Configurations		Environment Monitoring Sensors (including voltage,	
Configurations	Optional	current, temperature, and humidity sensors), Printer	
		(compatible with PCL3)	
	Online Data Management	Wireless Data Transfer Module, High Gain Antenna	
	System for Packaging Testing		

Please Note:

• Pictures used are for illustration purposes only and may differ from the actual product received.

 Labthink International is always dedicated to the innovation and improvement of product performance and function. Therefore, technical specifications are subject to change without further notice. Please visit our

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