HydroDetector
Hydrostatic Head Tester

HydroDetector is used for hydrostatic pressure testing of textiles, leather and film to assess the waterproof penetration ability of materials under high water pressure. The high-definition camera records and analyzes the whole process with AI. It detects the third drop of water, stops the test, and alerts the operator via a smartphone app. It also uploads the test results and retains the video and pictures for traceability. IoT tech can connect the instrument to smartphones and computers. It can also link to ERP and LIMS systems. This will greatly improve testing efficiency. It can precisely control the test pressure and range. It can also perform a high pressure test of 600 Kpa.

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- **Ultra-high-definition industrial vision camera, can recognize the water droplets and end the test.**
  After starting the test, the ultra-high-definition camera will: Photograph the sample's surface. Monitor the water seepage. Identify, then record the time and pressure of the three water droplets. It will then stop the test and notify the operator via the SmarTexLab App.

- **Intelligent detection and manual judgement**
  In addition to intelligent detection of water droplet oozing, manual observation and judgement can also achieve. When the test is completed, image reports and videos are generated, and the results can be manually verified by playing back the videos.

- **Avoid water spraying after bursting of sample**
  A unique and precise pressurisation mode that can pressurise the sample without compressed air. It gently and stably pressurises the sample, avoiding water spray after the sample bursts.

- **High-pressure testing is possible.**
  HydroDetector are capable of high-pressure testing up to 600 kPa. You can customize higher test pressures.

- **Intelligent Sample Clamping System**
  The instrument drives the servo clamping system with an AI algorithm. During testing, it can adjust the clamping pressure based on the samples' thickness and hydrostatic pressure resistance. This prevents water leakage while ensuring the right pressure. It also avoids changing the fabric's shape or structure. This prevents invalid tests from damaged samples or seepage at the edges.

- **Smart Hydrostatic Head Test**
  The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It then connects to ERP/LIMS through an API. The instrument can also connect directly to ERP/LIMS. Test orders and standards can be sent to the instrument. The sample information can be read by scanning the code. The program can be automatically selected and tested. After the test, a digital raw record will be created. It will include the test process, results, temperature, and humidity. This record will be uploaded to the system. It will be summarized with other tests to output a report. All relevant parties can view the report in real-time. The operator can remotely monitor the status of multiple tests. They can also modify the test requirements, get a reminder before the test ends, and stop or repeat the test. You can use online chat to get quick support from ChiuVention customer service. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, perform OTA remote upgrades regularly.
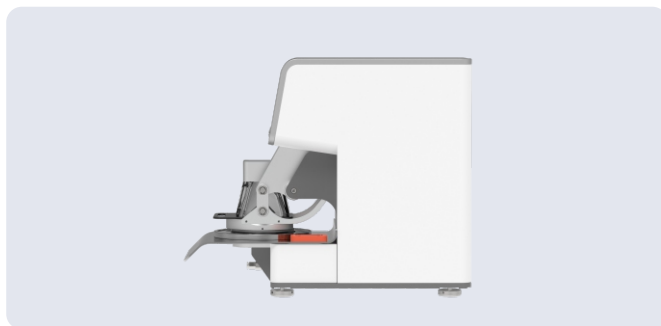
Power
220/110V 50/60Hz

Weight
60kg

Dimension
360*670*635 mm (L*W*H)

Specification

Standard test head	100cm²
Units	Pa, kPa, mmHg, cm H$_2$O
Pressure range	0~600 Kpa (50m water column)
Rising speed of water pressure	1 ~ 60 kPa/min, with variable and adjustable speed

Standard

AATCC 127 Option 2
ISO 811
GB/T 4744
GB/T 40910
JIS L1092

Optional Standard

ISO9073-16
EN 1734
ISO 1420
AATCC 208
IS 7016(Part7)
NWSP 080.6.RO(15)
GB/T 24218.16
FZ/T 01004