



# **HydroDetector**Hydrostatic Head Tester

The HydroDetector Hydrostatic Head Tester can test materials for waterproofness. It works on textiles, leather, and films under high water pressure. The HydroDetector allows for complete automation and intelligent testing. It has a high-definition camera that records the test process. Al algorithms automatically check for water droplets or other test-ending conditions that meet the standards. The system then ends the test and notifies the operator via smartphone or buzzer. It also has an intelligent assistance mode to trace the test video for manual correction. The adaptive sample clamping system and servo-mechanical pressing ensure stable, precise testing. No need for compressed air, which eliminates noise. IoT tech connects the instrument, smartphones, and computers. It integrates with ERP and LIMS systems. This greatly boosts testing efficiency.

## HydroDetector

### **Hydrostatic Head Tester**



#### Automated Intelligent Testing

The system has visual detection with smart judgement. It uses a high-definition camera to record the testing process. Al algorithms automatically identify and determine compliant water droplets or other test-ending conditions. They then end the test and notify the operator via smartphone or buzzer. This testing instrument supports continuous learning and upgrades. It enables more accurate detection and judgement. It has remote OTA (Over-the-Air) updates for better functionality.

#### Intelligent Assistance Mode

The system includes a video playback feature. After automated testing, complex samples can be quickly reviewed via video playback. If there is an error in judgment, manual annotation can quickly correct it.

#### Adaptive Sample Clamping System

The servo clamping system can automatically adjust the clamping force based on the testing pressure by using advanced algorithms. This keeps enough clamping force to prevent water leaks and also protects the sample's integrity.

#### Servo-Mechanical Pressurization

The servo-mechanical pressurization system applies pressure at a standard rate. This ensures stability and prevents large water droplets from spraying after sample rupture.

#### High-pressure testing is available.

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

#### Powerful and User-friendly Control Screen

The control screen is powerful and as easy to use as a smartphone. It allows convenient viewing of the testing process and results. Test videos and results can be exported in several formats for review. The test results can be edited and corrected based on manual judgement. With the IoT app, users can monitor tests remotely. They get alerts when tests finish. They can view or send test reports, or upload them to the LIMS. Besides, this instrument does not need compressed air, eliminating noise. Its unique design allows for rapid replacement of fixtures and mesh clamps.



#### Power

220/110V 50/60Hz



#### Weight

94kg



#### **Dimension**

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

#### **Specification**

Standard test head	100cm <sup>2</sup>
Units	Pa, kPa, mmHg, cm H₂O
Pressure range	0~600 kPa (50m water column )
	Higher test pressures customizable
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.R0(15) GB/T 24218.16 FZ/T 01004