

MULTI-STIMULUS DETECTOR TESTING

Smoke, Heat and CO Detector Testing in one Test Tool



testifire® is the world's first 3-in-1 detector tester with optional communications module and audit trail facility. Its design enables fast and efficient testing of Smoke, Heat or CO fire detectors and, with the ability to test with these stimuli sequentially or simultaneously, it is also the perfect tool for testing multi-sensor detectors.

Smoke, Heat and CO stimuli are all created in the single unit that is Testifire. There are no pressurised canisters of gas and stimuli are generated as required using processes fuelled by replaceable capsules.

Testifire is the result of several years of technological development and, since launch, has continued to develop in response both to market feedback and new materials and technologies. By far the most advanced tester available, Testifire is UL certified and approved by leading detector manufacturers from around the world.



User Interface

Test modes and cycles are selected and programmed via the user interface. Multiple languages are available in the set-up procedure.

Test cycle feedback is provided by two LEDs which flash according to the type of test selected and progress of the test.

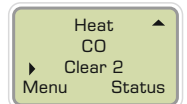
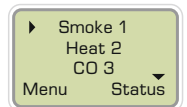
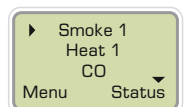
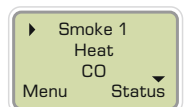


Test Modes

- **Smoke:** generated internally from a fluid supplied by a replaceable capsule and then blown into the detector. Suitable for a wide variety of detection technologies (see Specifications)
- **Heat (1):** for rate-of-rise and fixed temperature heat sensors up to 90°C (194°F)
- **Hi Heat (2):** heat at a higher temperature for heat sensors up to 100°C (212°F)
- **Carbon Monoxide (CO):** generated internally from heated carbon material supplied by a replaceable capsule and then blown into the detector

Test Cycles

- **Single Testing:** a single stimuli test can be carried out using Smoke, Heat or CO
- **Simultaneous Testing:** Smoke, Heat and CO generated at the same time, in one test, in any combination programmed by the user
- **Sequential Testing:** Smoke, Heat and CO can be carried out in any order programmed by the user
- **Clearing:** clean air is blown to remove stimuli away from the detector enabling rapid detector reset times



Applications

- Point detectors (single and multi-sensor)
- Aspirating detectors (single and multi-criteria)
- Traditional smoke sensors based on optical and ionisation technologies
- Advanced smoke sensors based on dual scatter angles and dual wavelength technologies
- CO fire sensors
- Heat sensors utilising thermistor and bi-metallic technologies
- Virtual chamber detectors
- Fire detectors using complex interdependent sensor algorithms

Performance

- Overall significant time savings and productivity enhancements through:
 - deployment of latest-technology stimuli generation and delivery
 - replacement of multiple tools with a single tester
 - dramatic reduction in detector and system reset times through use of clearing mode
- Substantial reduction in test times through combined stimuli deployment on multi-sensor detectors
- Unique ability to activate detectors using complex interdependent sensor algorithms
- Faster testing of detectors up to 100°C through use of hi-heat mode
- Elimination of detector contamination and damage risk through controlled stimuli release
- Greater immunity from variation in ambient conditions through new stimuli generation technologies
- Wider range of detectors accommodated with wider cup and remote control option
- Up to 66%* reduction in multi-sensor test times through use of simultaneous stimuli

* If the detector and panel can enable and verify individual sensor activation

Image

- Enhanced professional image of service organisation through use of top-line technology

Compliance

- Cost effective compliance with global test standards for field functional detector tests
- Audit trail option through Communications Module
- Optional annual calibration, traceable to national standards
- Pressurised aerosol hazards eliminated through use of capsules for smoke and CO generation

Environment

- The smoke and CO capsules put an end to global warming (GWP) and volatile organic compound (VOC) issues while still retaining safe, non-flammable test stimuli

Health & Safety

- Through replacement of aerosol canisters with capsules:
 - Retention of non-flammable stimuli
 - Elimination of potential hazards and dangers that aerosol canisters present
 - Dramatic reduction in transport and storage costs
- Test stimuli that is non-toxic and non-hazardous to the user
- Maximum safety for CO testing through on-demand controlled, low ppm, CO generation

Approvals & Certifications

- UL certified
- Tested, approved and recommended for use by world-leading detector manufacturers
- CE, RoHS, and WEEE compliant
- Produced by the world's only ISO 9001 listed specialist fire detector tester manufacturer

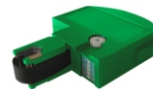


Testifire 1000
Smoke & Heat Testing

Testifire 2000
Smoke, Heat & CO Testing



testifire®
smoke capsule **TS3**



testifire®
co capsule **TC3**

Audit Trail & Automated Test Facility**

Testifire's fourth element is a Communications Module that provides audit trail information for test activities as an optional integral part of a new Testifire unit or as a retrofit for later addition in the field. The module, in conjunction with field installable RFID Tags on detectors, enables data exchange between tags and selected PDAs. This provides not only a seamless connection between the detector and back office audit systems but allows the automatic initiation of detector tests.

Infrared Remote Control

Generation of test stimuli starts when Testifire is positioned over a detector and remote controls are not generally required. Certain detectors (such as those with virtual chambers) have no physical features to cause stimuli generation to start. The optional infrared remote control can be used to initiate the test procedure in such situations.

Product Support

A comprehensive product support service includes optional annual service and calibration, fixed price product servicing and repair together with the possibility to extend the product warranty on an annual basis. Further details at www.testifire.com

**Currently in development





Testifire Product Selector

Optional Accessories

	Infrared Remote Control	Battery Baton	Fast Charger	Universal Removal Tool	Protective Carrying Bag	Access Height up to 6m	Access Height up to 9m
Testifire 25	●						
Solo 200				●			
Solo 760		●					
Solo 726			●				
Solo 100						● (Solo 100 x 1)	
Solo 101							● (Solo 100 + Solo 101 x 3)
Solo 610				●			

Solo Poles Access Height

Solo Model No.	Access Height (approx. max.)
100	6m (20ft)
100+101 (1)	7m (23ft)
100+101 (2)	8m (26.25ft)
100+101 (3)	9m (30ft)

Products



	Application						Accessories				Access	
	Smoke Testing	Heat Testing	CO Testing	Smoke/Heat Testing	Smoke/Heat/CO Testing	ASD Testing	Battery Baton	Fast Charger	Universal Removal Tool	Protective Carrying Bag	Access Height up to 6m	Access Height up to 9m
Testifire 1000	●	●		●		●						
Testifire 2000	●	●	●	●	●	●						
Testifire TS3	●											
Testifire TC3			●									
Testifire 1001	●	●		●		●	● (x2)	●				
Testifire 2001	●	●	●	●	●	●	● (x2)	●				
Testifire 6001	●	●		●		●	● (x2)	●	●	● (Solo 100 x 1)		
Testifire 6201	●	●	●	●	●	●	● (x2)	●	●	● (Solo 100 x 1)		
Testifire 9001	●	●		●		●	● (x2)	●	●	●	● (Solo 100 + Solo 101 x 2)	
Testifire 9201	●	●	●	●	●	●	● (x2)	●	●	●	● (Solo 100 + Solo 101 x 3)	

Specifications

Suitable Detector Types	Optical point (photoelectric) smoke sensors (single, laser, dual wavelength or dual scatter types) Aspirating detectors Virtual chamber detectors Ionisation smoke sensors Thermal sensors (fixed temperature and rate-of-rise types) Carbon monoxide (CO) fire sensors Multi-sensor or multi-criteria detectors Conventional, addressable or analogue addressable detectors of any of the above types
Test Modes	Smoke: generated internally from a fluid supplied by replaceable capsules and then blown into the detector Normal Heat: to test rate-of-rise and fixed temperature heat detectors up to 90°C (194°F) Hi Heat: to test rate-of-rise and fixed temperature heat detectors up to 100°C (212°F) Carbon Monoxide (CO): harmless low levels of CO generated internally from carbon material and blown into the detector at a concentration of approximately 100ppm (not calibrated)
Test Cycles	Single Testing: Smoke, Heat or CO selected as a single test option Simultaneous Testing: Smoke, Heat and CO (as appropriate) in any combination as programmed by the user together in a single test Sequential Testing: Stimuli produced according to the order programmed by the user Clearing: clean air is blown to remove previously applied Smoke or CO
Operating Features	Colour coded LED user feedback Adjustable multi-position head Automatic test initiation (infra-red beam senses when cup is placed over a detector) Optional remote control
Safety Features	Battery over-current cut-out Default 2 minutes maximum test duration timeout Auto power off after 5 minutes of inactivity CO generated on demand (no gas stored) No Pressurised containers No cables or trailing leads
Power Source	Battery Baton: nominal 7.2V 2.2Ah NiMH rechargeable battery pack with internal over-current protection connects directly to Testifire (no cables or wires) Requires Solo 725 Battery Charger (using 100-230VAC or 12VDC input) for charging
Battery Charge Time	75-90 minutes. (if completely discharged)
Environment	Operating temperature range: +5°C to +45°C (41°F to 113°F) Operating humidity range: 0 to 85% RH non-condensing Storage temperature range: -10°C to +50°C (14°F to 122°F) Storage humidity range: 0 to 90% RH non-condensing (up to +35°C / 95°F)
Weights	Testifire 1000: 990g (with capsule) Testifire 2000: 1.23kg (with capsules) Testifire TS3 Smoke Capsule: 45g Testifire TC3 CO Capsule: 42g Solo 760 Battery Baton: 0.5kg
Dimensions	Testifire 1000: Bellows width: 153mm max. Head Unit height: 224mm max. (397mm including handle) Testifire 2000: Bellows width: 153mm max. Head Unit height: 273mm max. (397mm including handle)

International Patents

Testifire is protected by the following patents and has patents applied for:

Patents: EP(FR,GB)091055B, DE69820382.8, ZL98120414.7, US6423962, EP(FR,GB)1290661B, DE60112442.1, ZL01801074.1, US6640608, HK1065150, EP(FR,GB)1390927B, DE50205116.7, DE60314594.9, GB2385179B, GB2409319B.

Patents Applied for: US10/503745, EP1794728A, WO 2007/015045, WO 2007/060447, GB2432703A

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