

# REMOTE TESTING



For **ASPIRATING SMOKE DETECTION (ASD) SYSTEMS**



 **scorpion**<sup>®</sup> **ASD**  
REMOTE DETECTOR TEST TECHNOLOGY

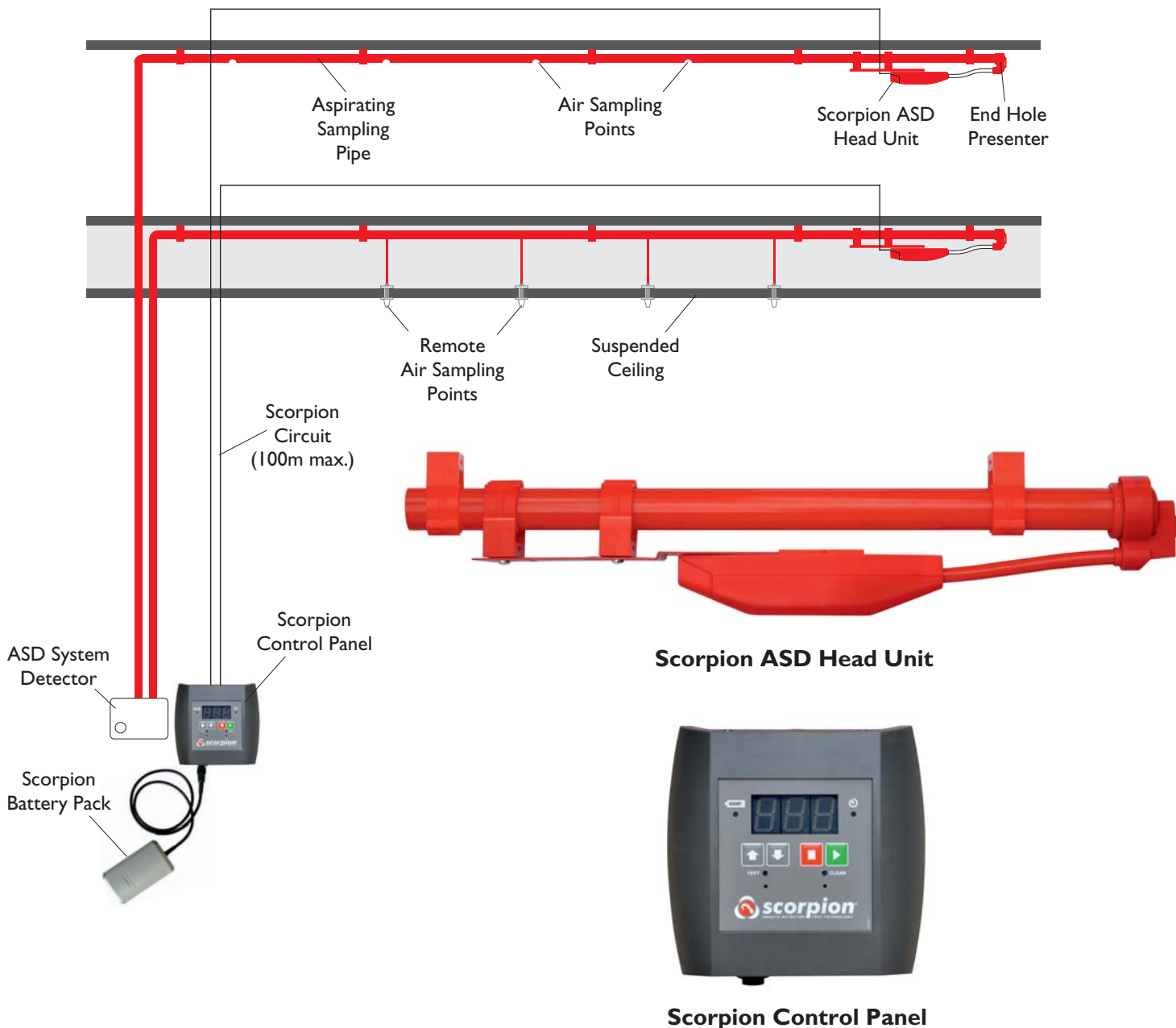
[www.scorpion-tester.com](http://www.scorpion-tester.com)

**Scorpion® ASD** is a unique, functional remote smoke detector test system for Aspirating Smoke Detection (ASD) Systems that solves a number of long standing challenges, assists compliance with codes and standards and delivers radical time, cost and disruption savings.

Traditional post commissioning ASD testing is generally performed by trying to introduce a test smoke (often of inappropriate suitability or even questionable quality) into individual sampling points. Not only can this be highly impractical but it can also contaminate an ASD system. Scorpion offers an approved, benign and effectively non-contaminating test particulate delivered in a controlled and repeatable manner.

With Scorpion permanently positioned at the end of a pipe run, a controlled and consistent stimulus is introduced for each test throughout the system lifetime. By recording the moment of Scorpion activation and the moment of alarm signal, the transport time can be measured. Comparing this against the retained commissioning data, previous tests and acceptable tolerances, judgments can be made regarding the integrity of the aspirating system.

## Installation Example

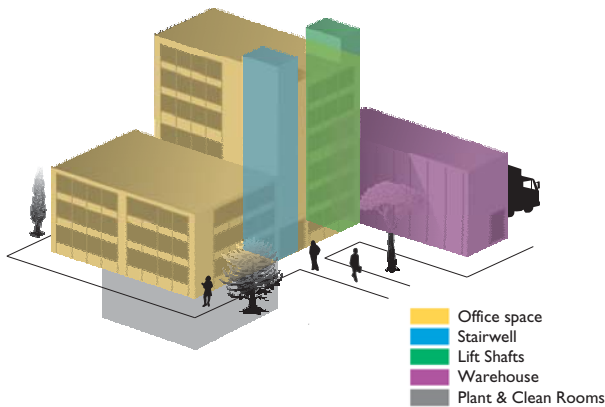


## Improved Access Benefits

- Connecting a remote Scorpion to a convenient Control Panel means:
  - Additional (and unsightly) pipe runs eliminated
  - Access challenges avoided
  - Disturbance and disruption averted
- Transportation time evaluation avoids testing every sampling point periodically

## Time and Cost Saving Benefits

- Huge time savings from accessibility gains (even where physical access equipment was not required)
- Repeatable Transport Time integrity evaluations
- Sequential testing of multiple units from a single location delivers radical time savings
- Out of hours working minimized or eliminated
- Physical access equipment costs eradicated



### Conventional Testing

Total Test Time\*:

14:58:20

### Testing using Scorpion

Total Test Time\*:

02:07:38

\*Above example of time savings are theoretical only.

## Applications (typical)

- 24/7 public areas such as airports
- Restricted access areas such as prisons, military premises or banks
- Continuously operational areas such as manufacturing plants
- Hard to access areas such as warehouses
- Dangerous to access areas such as top of lift shafts / elevators

## Features

- Smoke generation tailored for functional testing of ASD systems and point type smoke detectors
- Adjustable smoke time to suit characteristics of system under test
- Transport time function to monitor ongoing ASD system performance

## ASD Particle lifetime

- Suitable for 120 seconds / 100 metre pipe runs

## Testing capacity

- In excess of 240 tests of 15 seconds of smoke per Scorpion

## Suitable ASD technologies

- Light Scatter
- Particle Counting
- Cloud Chamber

## Appropriate Stimulus

- Benign particulate delivered in a controlled and repeatable manner
- Reduces possibility of overdosing or contaminating detector through excessive stimulant application
- Approved by world-leading ASD manufacturers

## Compliance

- Helps comply with national and international standards on test of fire systems

## Installation

- Retrofit to existing installations or onto new systems
- Up to 8 Scorpion heads (ASD or Point) connected to a single Control Panel
- One head at end of each pipe run
- Heads located up to 100m<sup>(1)</sup> away from the panel
- Battery powered

<sup>(1)</sup> Depends on cable used

## Product Selector



**Scorpion ASD Head Unit Kit**  
SCORP 2001

**Scorpion Control Panel**  
SCORP 8000  
(including mounting box)

**Scorpion Power Pack**  
SCORP 50

**Scorpion Battery Cable**  
(for connecting Solo 760  
Battery Baton to Scorpion  
Control Panel)  
SCORP 60

**Solo Universal  
Fast Battery  
Charger**  
SOLO 726

## Technical Specifications

### Environment

	Scorpion Battery Pack	Scorpion Head Unit	Scorpion Control Panel
<b>Transport / Storage Temperature</b>	-20°C to 35°C (-4°F to 95°F)	-20°C to 70°C (-4°F to 158°F)	-10°C to 50°C (14°F to 122°F)
<b>Storage Humidity</b>	0-90% RH (non-condensing)	0-90% RH (non-condensing)	0-90% RH (non-condensing)
<b>Operating Temperature</b>	5°C to 45°C (41°F to 113°F)	0°C to 60°C (32°F to 140°F)	5°C to 45°C (41°F to 113°F)
<b>Operating Humidity</b>	0-85% RH (non-condensing)	0-95% RH (non-condensing)	0-85% RH (non-condensing)
<b>Ingress Protection</b>	IP40	IP20	IP40
<b>Weights &amp; Dimensions</b>	523g 139mm (L) x 81mm (W) x 48mm (H)	<200g 155mm (L) x 54mm (W) x 34mm (H) (excluding nozzle)	<500g 150mm (L) 155mm (W) x 37mm (H)

**Note:** The Scorpion system is designed for specific applications within the above parameters. For additional information regarding location and installation procedures, please refer to the Scorpion User Manual at: [www.scorpion-tester.com](http://www.scorpion-tester.com)

### Safety features

- Scorpions energized only at time of test
- Isolation between Scorpion circuit and detection system
- Internal over-current protection on Scorpion circuit
- Battery over-current cut-out

### Power source and charge data

- Scorpion Battery Pack (SCORP 50) - NiMH rechargeable nominal 7.2v 2.2Ah
- Solo Battery Baton (Solo 760) - NiMH rechargeable nominal 7.2v 2.2Ah
- Charging time 75 - 90 minutes (when completely discharged) using Solo-726 charger

### Cabling

- Scorpion circuit wiring: FP200 1.5 mm<sup>2</sup>, Lapp J-Y(ST) Y 0.5 mm<sup>2</sup>, or equivalent - 4 cores per Head Unit
- Maximum cable length per Scorpion Control Panel - 100 metres (depending on cable used)
- Maximum Scorpions per Control Panel - 8

As our policy is one of continuous improvement, details of products described within this publication are subject to change without notice. All information provided here is believed to be correct at the time of going to press. Every effort has been made to ensure the accuracy of information which is provided in good faith but nothing contained herein is intended to incorporate any representation or warranty, either express or implied or to form the basis of any legal relations between the parties hereto, additional to or in lieu of such as may be applicable to a contract of sale or purchase.

This information must be read in conjunction with the Scorpion Installation Manual & User Guide which provides further information on Scorpion applications, compatibility and suitability.



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