

## Technical Quick Guides

### SmokeCloak EASY Series (600/1100)

#### Fog Production Time & Retrigger Guide

On the EASY 600/1100 units the Fog Production Runtime and the Number of Retriggers can be configured via the 4 dipswitches. This guide outlines how to set these values, their minimum/maximum values, and how long a bottle of FL600 will last depending on the configuration.

##### Fog Production Time

The Fog Production Time is set via dipswitches 1 & 2 and determines the length of time where fog is being produced in each trigger. This value can be set to 15, 30, 45 or 60 seconds.

SW2				
1	2	3	4	
0	0	x	x	15 sec
1	0	x	x	30 sec
0	1	x	x	45 sec
1	1	x	x	60 sec

SmokeCloak Easy interface DIP switch settings

##### Number of Retriggers

The Number of Retriggers is set via dipswitches 3 & 4 and determines how many times the system will retrigger if the alarm continues to signal. Including the initial trigger, the amount of maximum total triggers will be one more than this retrigger value. The Number of Retriggers can be set to 0, 2, 4 or 8.

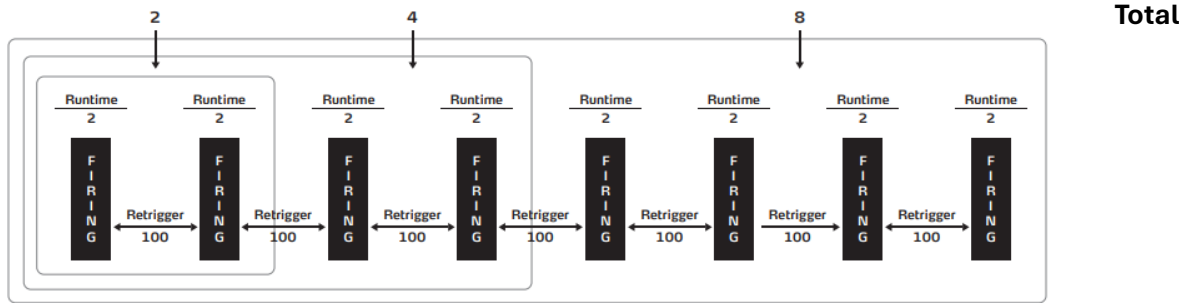
SW2				
1	2	3	4	
x	x	0	0	0
x	x	1	0	2
x	x	0	1	4
x	x	1	1	8

SmokeCloak Easy interface DIP switch settings

##### Trigger/Retrigger Timeline

1. If an alarm is detected when the system is armed, the initial trigger will be activated. This will run for 15-60 seconds depending on dipswitches 1 & 2.
2. The unit calculates the number of retriggers left ( $\# \text{NumberOfRetriggers} + 1 - \# \text{TotalTriggersSoFar}$ )
3. After triggering, if there are no retriggers left, the unit will deactivate after this trigger. It will not activate again until the system has been disarmed, rearmed, and reactivated.
4. After triggering, if there are retriggers left, the unit will be dormant for a 100 second grace period before retriggering again if alarm is still signalling.

5. Repeat steps 2-4.



### Expected Runtime per FL600 bottle (1L)

As per SmokeCloak's specifications, a 1L bottle of FL600 fluid is expected to last for:

- 14 x 30 second activations on the EASY 600
- 7 x 30 second activations on the EASY 1100

This number is an estimation based on a variety of factors such as Fog Production Time, Number of Retriggerers and temperature (internal & external), but we can still use it to ballpark how many separate alarms the unit will fire for before the fluid will be empty.

- **15 second trigger, no reactivations (15s active max activation per alarm)**
  - EASY 600: ~ 28 alarms
  - EASY 1100: ~ 14 alarms
- **30 second trigger, 2 reactivations (90 seconds max activation per alarm)**
  - EASY 600: ~ 5 alarms
  - EASY 1100: ~ 2 alarms
- **60 second trigger, 8 reactivations (540 seconds max activation per alarm)**
  - EASY 600: 0.8 alarms
  - EASY 1100: 0.4 alarms

The above estimations outline why it's important to properly consider the current application when determining runtime & reactivation settings. A 15 second trigger with no retriggerers uses a very small amount of fluid but is unlikely to fully cover an area in most applications, especially with the EASY 600. A 60 second trigger with 8 reactivations will provide far better coverage but will likely use the entire bottle of fluid before it even finishes triggering, especially with the EASY 1100. A "Goldilocks Zone" of suitable smoke coverage vs fluid usage should be determined for each installation.