



General Monitors Inc.  
an MSA Company  
16782 Von Karmon  
Irvine, CA 92606  
United States



# Certificate of Compliance to IEC 61508

**FM Approvals**  
Certifies herewith that the

*UV/IR Flame Detector*  
(Safety Manual [FL500, FL500-H2 UV/IR Flame Detector 10193216/01])

**Complies with the relevant requirements of standards listed below:**

Standards	Description	Compliance
IEC 61508-1: 2010	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems- General Requirements	Part 1
IEC 61508-2: 2010	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems	Part 2
IEC 61508-3: 2010	Functional Safety of Electronic/Electrical/Programmable Electronic Safety-Related Systems – Software Requirements	Part 3

And therefore

**IS DECLARED “FIT FOR USE” IN A  
Low Demand SAFETY APPLICATION**

Models	SIL	HFT	SFF	PFD	$\lambda_s$	$\lambda_{DD}$	$\lambda_{DU}$
Analog Output	3	0	99%	1.78E-06	6.04E-07	4.34E-07	3.72E-11
Relay Output	2	0	98%	2.71E-05	7.19E-07	6.15E-07	2.24E-08

\*\*  $PFD_{avg1001}$  assumes a 4-hour repair time and 90-day proof test interval.

*This certificate is subject to conditions of use presented in FM Approval Report  
Project ID # PR449249 / PR459870*

  
James E. Marquedant  
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FM Approvals  
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10 December 2021

Date