



## EC DECLARATION OF PERFORMANCE

No: 220811-PYH



This declaration was compiled following the provisions of EU Construction Products Regulation CPR No.305/2011 & UKCA SI 465/2019.

<b>EV-PYH-SCI</b>	Analogue addressable optical Smoke/Heat detector with SCI
<b>EV-PYH</b>	Analogue addressable optical Smoke/Heat detector
<b>Part numbers:</b>	F20-82425 & F20-82420
<b>Compatible Bases:</b>	UB-4, UB-6-SL-EV, UB-6-EV, STB-4SE, STB-4SE-EV, IP55-Base + Mount, EV-B-SCI, EV-SPB-SCI, EV-24VRL, EV-SDR Base and EV-AV2 Base.
<b>Manufacturer:</b>	Nittan Europe Ltd, Old Woking, Surrey GU22 9LQ England

We, Nittan Europe Limited of Hipley Street, Old Woking, Surrey GU22 9LQ England, declare that the above listed products comply with the following:

Standard EN54-5:2017 + A1:2018, Heat detectors - Point detectors.

Standard EN54-7:2018, Smoke detectors - Point detectors.

Standard EN54-17:2005 / AC: 2007 Short Circuit Isolators.

Standard EN54-29:2015, Multi-sensor Fire detectors.

EMC Directive 2014/30/EU & Electromagnetic Compatibility Regulations 2016 UK

Low Voltage Directive (LVD) 2014/35/EU & Electrical Equipment (Safety) Regulations 2016 UK

RoHS Directive (EU) 2015/863 & Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 UK

The intended use for the construction product is Fire Detection and Alarm Systems.

90789 Intertek Deutschland GmbH, StangenstraBe 1, 70771 Leinfelden-Echterdingen  
Notified body No. 0905, have conducted Type testing and Factory Production Control Inspection in accordance with System 1, as set out in the CPR, and issued an EC Certificate of Constancy of Performance 0905-CPR-220811.

Intertek UK, Cleeve Road, Leatherhead, Surrey, KT22 7SA Approved body number 0359, have issued the UKCA Certificate of Constancy of Performance 0359-UKCA CPR-00160 in accordance with UKCA SI 465/2019



# EC DECLARATION OF PERFORMANCE

No: 220811-PYH

Declared Performance:

Technical Characteristics	Performance	Harmonised Specification
Operating Voltage	20 Vdc to 38 Vdc	EN54-5: 2017 + A1:2018 EN54-7: 2018 EN54-17: 2005 / AC:2007
Quiescent Current	300 $\mu$ A	
Alarm Current (Including Indicator)	6 mA	
Remote LED Indicator Current	3 mA	
Operating Temperature	-10°C to +80°C	
Relative Humidity	$\leq$ RH 95%	
Dimensions	$\varnothing$ 104mm x 35.0mm	
Mass	130 g	
<b>Operational Reliability</b>		<b>EN54-5: 2017 + A1:2018</b>
Position of heat sensitive element	PASS	EN54-5: 2017 Clause 4.2.1
Individual alarm indication	PASS	EN54-5: 2017 Clause 4.2.2
Connection of ancillary devices	PASS	EN54-5: 2017 Clause 4.2.3
Monitoring of detachable point heat detectors	PASS	EN54-5: 2017 Clause 4.2.4
Manufacturing adjustments	PASS	EN54-5: 2017 Clause 4.2.5
On site adjustment of response behaviour	PASS	EN54-5: 2017 Clause 4.2.6
Software controlled detector (when provided)	PASS	EN54-5: 2017 Clause 4.2.7
<b>Nominal activation conditions/Sensitivity</b>		
Directional dependence	PASS	EN54-5: 2017 Clause 4.3.1
Static response temperature	PASS	EN54-5: 2017 Clause 4.3.2
Response times from typical application temperature	PASS	EN54-5: 2017 Clause 4.3.3
Response times from 25 °C	PASS	EN54-5: 2017 Clause 4.3.4
Response times from high ambient temperature	PASS	EN54-5: 2017 Clause 4.3.5
Reproducibility	PASS	EN54-5: 2017 Clause 4.3.6
<b>Response delay (response time):</b>		
Additional test for suffix S point heat detectors	PASS (A2S/BS/CS)	EN54-5: 2017 Clause 4.4.1
Additional test for suffix R point heat detectors	PASS (A1R)	EN54-5: 2017 Clause 4.4.2
<b>Tolerance to supply voltage:</b>		
Variation in supply parameters	PASS	EN54-5: 2017 Clause 4.5.1
<b>Durability – Temperature resistance:</b>		
Cold (operational)	PASS	EN54-5: 2017 Clause 4.6.1.1
Dry heat (endurance)	PASS	EN54-5: 2017 Clause 4.6.1.2
<b>Durability – Humidity resistance:</b>		
Damp heat, cyclic (operational)	PASS	EN54-5: 2017 Clause 4.6.2.1
Damp heat, steady-state (endurance)	PASS	EN54-5: 2017 Clause 4.6.2.2
<b>Durability – Corrosion resistance:</b>		
Sulfur dioxide (SO <sub>2</sub> ) corrosion (endurance)	PASS	EN54-5: 2017 Clause 4.6.3
<b>Durability – Vibration resistance:</b>		
Shock (operational)	PASS	EN54-5: 2017 Clause 4.6.4.1
Impact (operational)	PASS	EN54-5: 2017 Clause 4.6.4.2
Vibration, sinusoidal (operational)	PASS	EN54-5: 2017 Clause 4.6.4.3
Vibration, sinusoidal (endurance)	PASS	EN54-5: 2017 Clause 4.6.4.4
<b>Durability – Electrical stability:</b>		
EMC, immunity (operational)	PASS	EN54-5: 2017 Clause 4.6.5



## EC DECLARATION OF PERFORMANCE

No: 220811-PYH

<b>Operational Reliability</b>		<b>EN54-7: 2018</b>
Individual alarm indication	PASS	EN54-7: 2018 Clause 4.2.1
Connection of ancillary devices	PASS	EN54-7: 2018 Clause 4.2.2
Monitoring of detachable detectors	PASS	EN54-7: 2018 Clause 4.2.3
Manufacturer's adjustments	PASS	EN54-7: 2018 Clause 4.2.4
On site adjustment of response behaviour	PASS	EN54-7: 2018 Clause 4.2.5
Protection against the ingress of foreign bodies	PASS	EN54-7: 2018 Clause 4.2.6
Response to slowly developing fires	PASS	EN54-7: 2018 Clause 4.2.7
Software controlled detector (when provided)	PASS	EN54-7: 2018 Clause 4.2.8
<b>Nominal activation conditions/Sensitivity</b>		
Repeatability	PASS	EN54-7: 2018 Clause 4.3.1
Directional dependence	PASS	EN54-7: 2018 Clause 4.3.2
Reproducibility (Low Sensitivity)	0.182 to 0.287 dB/m	EN54-7: 2018 Clause 4.3.3
Reproducibility (High Sensitivity)	0.142 to 0.211 dB/m	
<b>Response delay (response time)</b>		
Air movement	PASS	EN54-7: 2018 Clause 4.4.1
Dazzling	PASS	EN54-7: 2018 Clause 4.4.2
<b>Tolerance to supply voltage:</b>		
Variation in supply parameters	PASS	EN54-7: 2018 Clause 4.5
<b>Performance parameters under fire conditions:</b>		
Fire sensitivity	PASS	EN54-7: 2018 Clause 4.6
<b>Durability – Temperature resistance:</b>		
Cold (operational)	PASS	EN54-7: 2018 Clause 4.7.1.1
Dry heat (operational)	PASS	EN54-7: 2018 Clause 4.7.1.2
<b>Durability – Humidity resistance:</b>		
Damp heat, steady-state (operational)	PASS	EN54-7: 2018 Clause 4.7.2.1
Damp heat, steady-state (endurance)	PASS	EN54-7: 2018 Clause 4.7.2.2
<b>Durability – Corrosion resistance:</b>		
Sulfur dioxide (SO <sub>2</sub> ) corrosion (endurance)	PASS	EN54-7: 2018 Clause 4.7.3
<b>Durability – Vibration resistance:</b>		
Shock (operational)	PASS	EN54-7: 2018 Clause 4.7.4.1
Impact (operational)	PASS	EN54-7: 2018 Clause 4.7.4.2
Vibration, sinusoidal (operational)	PASS	EN54-7: 2018 Clause 4.7.4.3
Vibration, sinusoidal (endurance)	PASS	EN54-7: 2018 Clause 4.7.4.4
<b>Durability – Electrical stability:</b>		
EMC, immunity (operational)	PASS	EN54-7: 2018 Clause 4.7.5
<b>Essential Characteristics</b>		<b>EN54-17: 2005 / AC: 2007</b>
Performance under fire conditions	PASS	EN54-17: 2005 Clause 5.2
Operational Reliability:	PASS	EN54-17: 2005 Clause 4.0
Durability: Temperature Resistance	PASS	EN54-17: 2005 Clause 5.4/5.5
Durability: Vibration Resistance	PASS	EN54-17: 2005 Clause 5.9 to 5.12
Durability: Humidity Resistance	PASS	EN54-17: 2005 Clause 5.6/5.7
Durability: Corrosion Resistance	PASS	EN54-17: 2005 Clause 5.8
Durability: Electrical Stability EMC	PASS	EN54-17: 2005 Clause 5.3/ 5.13



## EC DECLARATION OF PERFORMANCE

No: 220811-PYH

Barry Sargent  
Technical Product Manager  
15<sup>th</sup> August 2022

