



1922-CPR-1595

DECLARATION OF PERFORMANCE

In accordance with 305/2011/EU
Ref: BİLGİ-CPR-202424-46

Product Code: teknim TWD-1850

Product Name: Wireless Optical Smoke + Heat Detector (Multisensor)

Manufacturer: Teknim Elektronik San. ve Tic. A.Ş.
Dudullu Organize Sanayi Bölgesi 1.Cadde İsmet Tarman İş
Merkezi No:1 D:32 34776 Ümraniye - İstanbul / Türkiye

Intended Use: Fire Detection and Fire Alarm Systems Installed in Buildings

Systems of Assessment and Verification for Constancy of Performance: System 1

Harmonized Standards: EN 54-5:2017/A1:2018;
EN 54-7:2018;
EN 54-25:2008, EN 54-25:2008/AC:2010,
EN 54-25:2008/AC:2012

Notified Body: DEDAL Attestation & Certification – NB No:1922

Essential Characteristics	Performance	EN 54-5:2017+A1:2018
Operational reliability		
— Position of the heat sensitive	Pass	4.2.1
— Individual alarm indication	Pass	4.2.2
— Connection of ancillary devices	N/A	4.2.3
— Monitoring of detachable detector	Pass	4.2.4
— Manufacturing adjustments	Pass	4.2.5
— On-site adjustment of response behaviour	N/A	4.2.6
— Software controlled detectors (when provided)	Pass	4.2.7
Nominal activation conditions / sensitivity /		
— Directional dependence	Pass	4.3.1
— Static response temperature	Pass	4.3.2
— Response times for typical application temperature	Pass	4.3.3
— Response times for 25°C	N/A	4.3.4
— Response times from high ambient temperature	Pass	4.3.5
— Reproducibility	Pass	4.3.6
Response delay (response time)		
— Additional test for suffix S point heat detectors	Pass	4.4.1
— Additional test for suffix R point heat detectors	N/A	4.4.2
Tolerance to supply voltage		
— Variation in supply parameters	Pass	4.5
Durability of Nominal activation conditions /Sensitivity		
Temperature resistance		
— Cold (operational)	Pass	4.6.1.1
— Dry heat (endurance)	N/A	4.6.1.2
Humidity resistance		
— Damp heat, cycling (operational)	Pass	4.6.2.1
— Damp heat, steady-state (endurance)	Pass	4.6.2.2
— Corrosion resistance: Sulphur dioxide (SO ₂) corrosion (endurance)	Pass	4.6.3
Vibration Resistance		
— Shock (operational)	Pass	4.6.4.1
— Impact (operational)	Pass	4.6.4.2
— Vibration, sinusoidal (operational)	Pass	4.6.4.3
— Vibration, sinusoidal (endurance)	Pass	4.6.4.4
Electrical stability		
— (EMC), Immunity (operational)	Pass	4.6.5

Essential Characteristics	Performance	EN 54-7:2018
Operational reliability		
— <i>Individual alarm indication</i>	Pass	4.2.1
— <i>Connection of ancillary devices</i>	N/A	4.2.2
— <i>Monitoring of detachable detectors</i>	Pass	4.2.3
— <i>Manufacturer's adjustments</i>	Pass	4.2.4
— <i>On-site adjustment of response behaviour</i>	Pass	4.2.5
— <i>Protection against the ingress of foreign bodies</i>	Pass	4.2.6
— <i>Response to slowly developing fires</i>	Pass	4.2.7
— <i>Software controlled detector (when provided)</i>	Pass	4.2.8
Nominal activation conditions / Sensitivity		
— <i>Repeatability</i>	Pass	4.3.1
— <i>Directional dependence</i>	Pass	4.3.2
— <i>Reproducibility</i>	Pass	4.3.3
Response delay (response time)		
— <i>Air movement</i>	Pass	4.4.1
— <i>Dazzling</i>	Pass	4.4.2
Tolerance to supply voltage		
— <i>Variation in supply parameters</i>	Pass	4.5
Performance parameters under fire conditions		
— <i>Fire Sensitivity</i>	Pass	4.6
Durability of Nominal activation condition / Sensitivity		
Temperature resistance		
— <i>Cold (operational)</i>	Pass	4.7.1.1
— <i>Dry heat (operational)</i>	Pass	4.7.1.2
Humidity resistance		
— <i>Damp heat, steady-state (operational)</i>	Pass	4.7.2.1
— <i>Damp heat, steady-state (endurance)</i>	Pass	4.7.2.2
Corrosion resistance		
— <i>Sulfur dioxide (SO₂) corrosion (endurance)</i>	Pass	4.7.3
Vibration Resistance		
— <i>Shock (operational)</i>	Pass	4.7.4.1
— <i>Impact (operational)</i>	Pass	4.7.4.2
— <i>Vibration, sinusoidal (operational)</i>	Pass	4.7.4.3
— <i>Vibration, sinusoidal (endurance)</i>	Pass	4.7.4.4
Electrical stability		
— <i>EMC, immunity (operational)</i>	Pass	4.7.5

Essential Characteristics	Performance	EN 54-25:2008+ AC:2010+AC:2012
Performance under fire conditions		
— Radio frequency links	Pass	4.2
— Alarm signal integrity	Pass	4.2.2
— General	Pass	5.2
— Reproducibility test	Pass	8.3.7
Response delay (response time to fire)		
— Test form alarm signal integrity	Pass	8.2.3
— Test for mutual disturbance between systems of the same manufacturer	Pass	8.2.6
Operational reliability		
— Immunity to site attenuation	Pass	4.2.1
— Identification of the RF linked component	Pass	4.2.3
— Receiver performance	Pass	4.2.4
— Immunity to interference	Pass	4.2.5
— Loss of communication	Pass	4.2.6
— Antenna	Pass	4.2.7
— Power supply equipment	Pass	5.3
— Environmental related requirements	Pass	5.4
— Documentation	Pass	6
— Marking	Pass	7
— Test for immunity to site attenuation	Pass	8.2.2
— Test for identification of RF linked components	Pass	8.2.4
— Test for identification of RF linked components	Pass	8.2.5
— Test of compatibility with other band users	Pass	8.2.7
— Test for the detection of a loss of communication on a link	Pass	8.2.8
— Test of the antenna	Pass	8.2.9
— General	Pass	8.3.1
— Test schedule for components tests	Pass	8.3.2
— Verification of the service life of the autonomous power source(s)	Pass	8.3.3
— Test for the low power condition fault signal	Pass	8.3.4
— Test for the polarity reversal	Pass	8.3.5
— Repeatability test	Pass	8.3.6
Durability of operational reliability and response delay. temperature resistance		
— Dry heat (operational)	Pass	8.3.9
— Dry heat (endurance)	Pass	8.3.10
— Cold (operational)	Pass	8.3.11
Durability of operational reliability. vibration resistance		
— Shock (operational)	Pass	8.3.16
— Impact (operational)	Pass	8.3.17
— Vibration. sinusoidal (operational)	Pass	8.3.18
— Vibration. sinusoidal (operational)	Pass	8.3.19
Durability of operational reliability. humidity resistance		
— Damp heat. cyclic (operational)	Pass	8.3.12
— Damp heat. steady-state (operational)	Pass	8.3.13
— Damp heat. steady state (endurance)	Pass	8.3.14
Durability of operational reliability. corrosion resistance		
— SO ₂ corrosion (endurance)	Pass	8.3.15
Durability of operational reliability. electrical stability		
— Electromagnetic compatibility (EMC). immunity tests (operational)	Pass	8.3.20

The performance of the product identified above is in conformity with the set of declared performance characteristics. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 under the sole responsibility of the manufacturer identified above.

Istanbul, 13.06.2024

Signed for and on behalf of the manufacturer by:

Saruhan Acar
Vice General Manager

A handwritten signature in black ink, consisting of a stylized 'S' followed by 'A' and a long horizontal stroke extending to the right.