

TO WHOM IT MAY CONCERN

IQSIGHT B.V.  
Achtseweg Zuid 173  
5651 GW Eindhoven  
The Netherlands

**Product Test Report**

**BT-VS 2026-E-005**

**Product**

**FLEXIDOME multi+ 7100i IR**

NMM-7703-AL

Multi+ dome 4x5MP 3.2-8.1mm IP66 IR

**The above mentioned IQSIGHT products have been tested in accordance and were found to comply with the tests listed below which were conducted during the development phase of the product.**

### Safety approvals

<b>Directive or standard</b>	<b>Description</b>
IEC 62368-1:2018	Audio/video, information and communication technology equipment - Part 1: Safety requirements
EN IEC 62368-1:2020 +A11:2020	Audio/video, information and communication technology equipment - Part 1: Safety requirements
AS/NZS 62368.1:2022	Audio/video, information and communication technology equipment - Part 1: Safety requirements
J62368-1(2023)	Audio/video, information and communication technology equipment - Part 1: Safety requirements
SASO-IEC 62368-1:2020	Audio/video, information and communication technology equipment - Part 1: Safety requirements
UL 62368-1, 3rd Edition, Issue Date: 2019-12-13, Revision Date: 2021-10-22	Audio/video, information and communication technology equipment - Part 1: Safety requirements
CSA C22.2 No. 62368-1:19, 3rd Edition, Issue Date: 2019-12- 13, Revision Date: 2021-10-22	Audio/video, information and communication technology equipment - Part 1: Safety requirements
CSA/UL 62368-1:2019	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC 62471:2006 EN 62471:2008	Photobiological safety of lamps and lamp systems

## EMC approvals

Directive or standard	Description
<b>EMC EU, 2014/30/EU (EMCD)</b>	<b>Electromagnetic Compatibility Directive</b>
<b>Emission</b>	
EN 55032:2015+A11:2020+A1:2020, Class A	Electromagnetic compatibility of multimedia equipment - Emission requirements
<b>Immunity</b>	
EN 55035:2017 +A11: 2020	Electromagnetic compatibility of multimedia equipment - Immunity requirements
<b>EMC USA</b>	
CFR 47 FCC part 15, Class A	Code of Federal Regulations, Radio Frequency Devices, Unintentional Radiators. Radiated Emission based on verification procedure.
ANSI C63.4-2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
<b>EMC Canada</b>	
ICES-003 (Issue 7-2020), Class A	Information Technology Equipment (Including Digital Apparatus) — Limits and Methods of Measurement
<b>EMC Japan</b>	
VCCI-CISPR 32:2016	Voluntary Control Council for Interference. Electromagnetic compatibility of multimedia equipment - Emission requirements.
<b>EMC Australian/New Zealand</b>	
AS/NZS CISPR 32:2015 + A1 2020	Voluntary Control Council for Interference. Electromagnetic compatibility of multimedia equipment - Emission requirements.
<b>Basic standards</b>	
CISPR 32:2015 + A1:2019	Electromagnetic compatibility of multimedia equipment - Emission requirements
EN IEC 61000-6-4:2019	Electromagnetic compatibility (EMC) - Emission Part 6-4: Generic standards - Emission standard for industrial environments
EN 50130-4:2011 +A1:2014	Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems
EN 50121-1:2017	Railway applications – Electromagnetic compatibility – Part 1: General
EN 50121-4:2016 + A1: 2019	Railway applications - Electromagnetic compatibility - Part 4: Emission and immunity of the signaling and telecommunications apparatus
EN IEC 61000-3-2: 2019 + A1: 2021	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase) (IEC 61000-3-2:2018/A1:2020)
EN 61000-3-3: 2013 + A1: 2019 + A2: 2021 + AC: 2022	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection

IEC 61000-4-2:2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test
IEC 61000-4-3:2020 (Ed. 4.0)	Electromagnetic compatibility (EMC) - Part 4-3 : Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4:2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
IEC 61000-4-5:2014 +A1: 2017	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test
IEC 61000-4-6: 2023	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-8: 2009	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test
IEC 61000-4-11: 2020 + COR1: 2020 + COR2: 2022 (Ed. 3.0)	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase

### **Environmental approvals**

<b>Directive or standard</b>	<b>Description</b>
RoHS EU, 2011/65/EU EN IEC 63000:2018	Restriction of the use of certain hazardous substances (RoHS)
WEEE EU, 2012/19/EU	Waste Electrical and Electronic Equipment (WEEE)
Packaging EU, 94/62/EC	Packaging and packaging waste
N2580-1 (Bosch standard)	Central directive Bosch-Norm N 2580-1: "Prohibition and declaration of substances" Bosch-Norm N 2580-1 regulates prohibited substances and those rated declarable in materials, and it is part of the requirements for materials.
N33 6 (Bosch standard)	Design for Environment (DfE): Design and manufacturing rules

### **Management system**

<b>Directive or standard</b>	<b>Description</b>
ISO 9001:2015	Quality management systems -- Requirements <u>Scope:</u> Development, production, installation and sales.
ISO 14001:2015	Environmental management systems -- Requirements with guidance for use <u>Scope:</u> Development, Production, Sales and After Sales.

## Reliability tests

According to: EN 50130-5:2011 Alarm systems Part 5: Environmental test methods  
Class IV, Outdoor in general

Test specification	Description
Dry heat (operational) (EN 60068-2-2:2007)	Temperature +70°C, Duration 16 hours.
Dry heat (endurance) (EN 60068-2-2:2007)	Temperature 55°C, Duration 21 days
Cold (operational) (EN 60068-2-1:2007)	Temperature -25°C, Duration 16 hours. <i>IQSIGHT tested more severe at -40°C.</i>
Damp heat, cyclic (operational) (EN 60068-2-30:2005)	Temperature +25°C to +55°C, Relative humidity 93%, 2 cycles.
Damp heat, cyclic (endurance) (EN 60068-2-30:2005)	Temperature +25°C to +55°C, Relative humidity 93%, 6 cycles.
Water ingress (operational) (EN 60529 Edition 2.2:2013)	Test procedure Rb1.1 or Rb1.2, 10min (Similar EN60529 IPX4). <i>IQSIGHT tested more severe for class IPx6</i>
Sulphur dioxide (SO <sub>2</sub> ) (endurance) (EN 60068-2-42:2003)	Temperature 25°C, SO <sub>2</sub> Concentration 25x10e-6, RH 93%, Duration 21 days.
Salt mist, cyclic (endurance) (EN 60068-2-52:1996)	28-day endurance test consists of 4 cycles with two phases: salt mist at 35°C for 2hours and damp heat at 40°C with 93% RH for 166 hours
Impact (operational) (EN 60068-2-75:1997 Test Ehb)	Impact energy 1 Joule, 5 impacts per exposed face (Similar to EN 62262 IK06 rating). <i>IQSIGHT tested more severe at 20 Joule, IK10 rating.</i>
Vibration, sinusoidal (operational) (EN 60068-2-6:2008)	Frequency range 10-150 Hz, 5 ms <sup>2</sup> , 3 axes, sweep rate 1 octave x min <sup>-1</sup> , 1 sweep cycles per axis functional mode.
Vibration, sinusoidal (endurance) (EN 60068-2-6:2008)	Frequency range 10-150 Hz, 10 m/s <sup>2</sup> , 3 axes, sweep rate 1 octave x min <sup>-1</sup> , 20 sweep cycles per axis.
Dust tightness (endurance) (EN 60529 Edition 2.2:2013)	Duration 8h (similar to EN 60529 IP5X). <i>IQSIGHT tested more severe for class IP6x</i>

### **Additional reliability tests**

<b>Activity</b>	<b>Description</b>
Environmental Type 4X (Raintight) UL50E	Type 4X Hose down Test, Gasket Tests, corrosion test.
Degrees of protection against external mechanical impacts (endurance) (IEC 62262:2002)	IK10, Impact energy 20 Joule, 5 impacts per exposed face → Operational: No loss of functions
Protection against foreign objects, water and access (endurance) (ISO 20653:2013)	IP66
MTBF (Mean Time Between Failures)	312119h -> Calculation of used components according Siemens SN29500
Operating temperature	-40°C to +55°C (with ambient convection)
Cold start test	Until ambient temperature -20°C (tested according EN 60068-2-1:2007)
Traffic Controller Assemblies with NTCIP Requirements NEMA TS 2-2021	Compliant to the next chapters when using a TS-2 compliant power supply: 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.9 and 2.1.10  NEMA TS 2-2021 Tested according chapter 2.1.5.1
Quality (Q) and Reliability (Z) testing	Annual product compliance. Verification tests to secure that products remain compliant to the specified requirements.

Data subject to change without notice.

Eindhoven, 2026