

# EU-Declaration of Conformity | EMC

## nr. 20220430T01

1. Product name: DIS-TURING C-V1.0.
2. This declaration of conformity is provided under the full responsibility of the manufacturer: Dutch IoT Solutions.
3. Dutch IoT Solutions declares that the equipment is designed and manufactured in such a way that it ensures electromagnetic emissions do not exceed the level above which radio and telecommunications equipment and other devices can no longer function in accordance with their intended purpose.
4. Dutch IoT Solutions declares that the equipment is designed and manufactured to guarantee a level of immunity to expected electromagnetic disturbances during normal use, allowing it to function without unacceptable deterioration of its intended use.
5. Object of the declaration:

The DIS Turing C-V1.0 is a very low power, water resistant, tracking sensor with LTE Cat M1 and NB-IoT connectivity.



6. The object described above is in accordance with Directive 2014/30/EU of the European Parliament and the Council of 26 February 2014 concerning the harmonization of the laws of the Member States regarding electromagnetic compatibility.
7. This table contains the relevant and applied harmonized standards:

Harmonised Standard		
ETSI 301-489-1	Harmonised Standard for ElectroMagnetic Compatibility	ElectroMagnetic Compatibility (EMC)
IEC/EN 55035	Electromagnetic compatibility of multimedia equipment - Immunity requirements	multimedia equipment (MME)

8. The notified body EMC MCC declares that the DIS-TURING C-V1.0 is found with none of the immunity tests acc. to IEC/EN 55035/ ETS 301-489-1: ESD, RF, errors occurred, and the DIS-TURING C-V1.0 remained operational. Also, indirect ESD had to be applied, as no metal accessible parts are available on the exterior. None of the electrical safety tests, acc. to IEC/EN 62368-1, apply to the Dutch IoT Pallet tracker as being supplied from internal, non-rechargeable batteries: 3 x AAA.

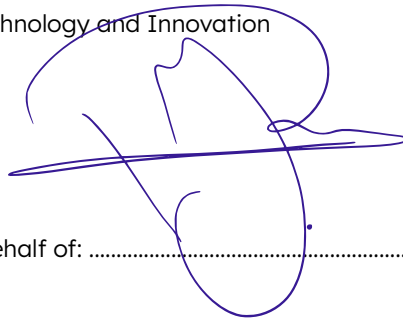
Immunity tests:

- Ia)** ESD (air discharge, IEC 61000-4-2) IEC/EN 55035  
ESD (contact discharge, IEC 61000-4-2) IEC/EN 55035
- Ib)** EFT (burst, EN 61000-4-4) acc. IEC/EN 55035
- Ic)** Surge (EN 61000-4-5) acc. IEC/EN 55035
- Id/e)** Conducted/ radiated EM fields (EN 61000-4-3/6) acc. IEC/EN 55035
- If)** Mains interrupts (IEC 61000-4-11) acc. IEC/EN 55035

Therefore **CE** is placed on this product.

Date: 31-08-2022

Patrick Verbakel, Technology and Innovation



Signed for and on behalf of: .....



## EU-Declaration of Conformity | Radio equipment

nr. 20220435T03

1. Product name: DIS-TURING C-V1.0.
2. This Declaration of Conformity is issued under the full responsibility of Dutch IoT Solutions.
3. The electrical equipment has been manufactured in accordance with the rules of good craftsmanship in the field of safety applicable in the Union, is properly installed, and adequately maintained. When used as intended, it does not jeopardize the health and safety of people and pets or the safety of goods.

Dutch IoT Solutions declares that the radio equipment is constructed to ensure the following:

- a) Protection of the health and safety of individuals and pets, and the protection of goods, including the objectives related to the safety requirements of Directive 2014/35/EU, but without applying the voltage limit;
- b) An appropriate level of electromagnetic compatibility as described in Directive 2014/30/EU.

4. Dutch IoT Solutions declares that the radio equipment is designed to effectively use the radio spectrum and to support efficient use of the radio spectrum with the aim of preventing harmful interference.
5. Subject of the declaration:

The DIS Turing C-V1.0 is a very low power, water resistant, tracking sensor with LTE Cat M1 and NB-IoT connectivity.



6. The object described above is in compliance with:

- Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment.

- Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.

7. This table contains the relevant and applied harmonized standards:

Harmonised Standard		
ETSI 301-489-1	Harmonised Standard for ElectroMagnetic Compatibility	ElectroMagnetic Compatibility (EMC)
IEC/EN 55035	Electromagnetic compatibility of multimedia equipment - Immunity requirements	Multimedia equipment (MME)
IEC/EN 55032	Electromagnetic compatibility of multimedia equipment - Emission Requirements	Multimedia equipment (MME)
IEC/EN 55035	Electromagnetic compatibility of multimedia equipment - Immunity requirements	Multimedia equipment (MME)
IEC/EN 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements	Electrical equipment

8. The notified body EMC MCC declares that the DIS-TURING C-V1.0 is found compliant with the RF emission test specifications class B requirements of IEC/EN 55032 and ETS 301-489-1 as well as ETS 300-440. Due to the size of the product and no external wire attached, no RF emissions occur in the bands below 1 GHz.

RF emission tests:

- Ea)** AC/DC supply interference voltage per IEC/EN 55032, class B
- Eb)** I/O line interference voltage per IEC/EN 55032
- Ec)** Radiated EM fields, IEC/EN 55032, by using an EM-clamp/ CDNs
- Ed)** Mains harmonic emission, EN 61000-3-2

Electrical safety:

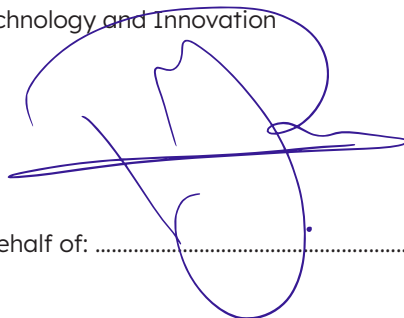
- Sa)** Bonding test acc. IEC/EN 62368-11
- Sb)** Insulation resistance acc. IEC/EN 62368-11
- Sc)** High voltage insulation acc. IEC/EN 62368-11
- Sd)** Leakage current acc. IEC/EN 62368-11

9. DIS Async FW: (GIT) enables the radio equipment to function as intended and is covered by the EU declaration of conformity.

Therefore **CE** is placed on this product.

Date: 31-08-2022

Patrick Verbakel, Technology and Innovation



Signed for and on behalf of: .....



## EU-Declaration of Conformity | RoHS

nr. 20220435T04

1. Product name: DIS-TURING C-V1.0.
2. This EU RoHS Declaration of Conformity is issued under the full responsibility of the manufacturer.
3. Dutch IoT Solutions declares that the EEA placed on the market, including cables and spare parts for repair, re-use, modification of functional aspects, or enhancement of the capacity of this equipment, does not contain any of the substances listed below:
  - Lead (0.1%)
  - Mercury (0.1%)
  - Cadmium (0.01%)
  - Hexavalent chromium (0.1%)
  - Polybrominated biphenyls (PBBs) (0.1%)
  - Polybrominated diphenyl ethers (PBDEs) (0.1%)

5. Object of the declaration:

The DIS Turing C-V1.0 is a very low power, water resistant, tracking sensor with LTE Cat M1 and NB-IoT connectivity.



6. The object described above conforms to Directive 2011/65/EU of the European Parliament and the Council of June 8, 2011, concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Therefore **CE** is placed on this product.

Date: 31-08-2022

Patrick Verbakel, Technology and Innovation

Signed for and on behalf of: .....

