

## INVESTIGATION REPORT

Our ref. 285154

Report No. 20142

**Product** Battery operated wireless transmitter for detecting outdoor temperatures

**Type** TEUFL v2.2

**Trade mark** TEUFL

**Applicant** Produal Oy, Ohjelmakaari 10, FI-40500, Jyväskylä, FINLAND

**Manufacturer** Produal Oy, Ohjelmakaari 10, FI-40500, Jyväskylä, FINLAND

**Investigation result** TEUFL wireless transmitter for detecting outdoor temperatures fulfill the requirements of standard EN 13485:2001, clause 4.8.1, Class 1, accuracy for measuring the air temperature value in the temperature range:

- 20°C ... + 30°C.

**Other information** See page 2.

**Date** August 4, 2016

**SGS Fimko Ltd.**

**Signature**



Janne Nyman  
Compliance Specialist



**Tested models** Battery operated wireless transmitter for detecting outdoor temperatures

**Measured values** +30°C .... 5.0°C... -20°C

Sample 1.	Deviation	Ref. Sensor 1 (2099)	Ref. Sensor 2 (2100)	Sample 2.	Deviation
-20.1	-0.1	-20.0	-19.9	-20.2	-0.3
4.9	-0.1	5.0	5.4	4.8	-0.6
30.0	0.1	29.9	30.5	30.4	-0.1
4.9	-0.1	5.0	5.3	5.1	-0.2
-20.1	-0.1	-20.0	-19.9	-20.2	-0.3
<b>Measuring uncertainty: ±0.5°C</b>					

**Accuracy class of thermometers for measuring the air temperature**  
EN 13485:2001 Clause 4.8.1

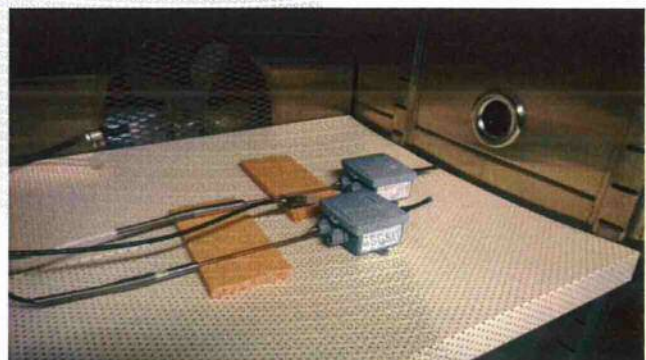
Class	1
Maximum permissible errors	± 1°C
Resolution	≤ 0.5°

**List of test equipment used**

Testing / measuring equipment	Range used	Calibration date
Fluke 1524 Reference thermometer (2098)	+30°C .... 5.0°C... -20°C	8.2.2016
Sensor (2099) for ref.thermometer (2098), used within 1cm from EUT #1	+30°C .... 5.0°C... -20°C	8.2.2016
Sensor (2100) for ref.thermometer (2098), used within 1cm from EUT #2	+30°C .... 5.0°C... -20°C	8.2.2016
HMT330 Humidity & Temperature transmitter (8639)	+30°C .... 5.0°C... -20°C	23.2.2016
Heating chamber (8626)	+30°C .... 5.0°C... -20°C	27.4.2015



**Photograph 1: Equipment under test**



**Photograph 2: Test setup**