

# EU-Type Examination Certificate

## 0470-RED-233022

In compliance with Directive (EU) No 2014/53 of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment (RED), this certificate applies to the product(s)

**Personal Locator Beacon  
Model: Tron SA20**

Placed on the market under the name or trademark of

**Jotron AS  
Ringdalskogen 8  
3270 Larvik  
Norway**

This certificate attests that all provisions concerning the assessment and verification of performance described in the standard(s)

<b>Art 3.1a:</b>	<b>EN IEC 62368-1:2020 + A11:2020 EN 50566:2017</b>	<b>EN 62209-2:2010 + A1:2019</b>
<b>Art 3.1b:</b>	<b>ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-19 V2.2.1 ETSI EN 301 843-1 V2.2.1</b>	<b>ETSI EN 301 489-3 V2.3.2 ETSI EN 301 489-22 V2.1.1 IEC 60945:2002 + Cor1:2008</b>
<b>Art 3.2:</b>	<b>ETSI EN 300 330 V2.1.1 ETSI EN 302 152-1 V1.1.1</b>	<b>ETSI EN 303 413 V 1.2.1 Cospas-Sarsat T.007 Issue – 5 Rev. 9</b>

as per Annex III (Module B) for the performance set out in this certificate, are applied.

Certificate issued December 19, 2023  
Certificate was first issued December 19, 2023

Certificate revision: 1.0

**For NEMKO (Notified Body 0470)**  
Authorized signatory: Roy Uggerud




This certificate has been granted by Nemko Group AS, Philip Pedersens vei 11, NO-1366 Lysaker, Norway

This certificate remains valid, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Nemko. Should the specified regulations or standards be amended, the products are to be re-approved prior to being placed on the market. Nemko is designated by the Norwegian Notified Authority as a Notified Body under the terms of the Norwegian regulations. This certificate is issued within the scope of the "Provisions for certification - Electrical products - Radio Equipment Directive 2014/53/EU" (Nemko C355), which is available on request.

Any person not a party to the contract pursuant to which this document is delivered may not assert a claim against Nemko for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel in the establishment or issuance of this document, and in connection with any activities for which it may provide

## ANNEX 1 – PRODUCT SPECIFICATIONS

### PRODUCT DESCRIPTION

Equipment type: **Personal Locator Beacon**  
Model/type: **Tron SA20**  
HW / SW / FW versions: **Hardware: R03**  
**Software: 1.3**  
Brand/trade name:   
Supply voltage: **Battery operated, 6 VDC**  
Rated power: -

### TECHNICAL CHARACTERISTICS

Transmitter type: **PLB**  
Intended purpose: **Beacon used for emergency situations and distress**  
Frequency range: **121.5 MHz and 406.031 MHz**  
Transmit power: **20 dBm @ 121.5 MHz**  
**36 dBm @ 406.031 MHz**  
Modulation type: **Phase Modulation**  
Maximum duty cycle: **96% @ 121.5 MHz**  
**1% @ 406.031 MHz**  
Number of channels: -  
Channel separation: -  
Antenna type: **Integral antenna**  
Maximum antenna gain: **-4 dBi @ 121.5 MHz**  
**+5 dBi @ 406.031 MHz**

### MANUFACTURER

Name: **Jotron AS**  
Address: **Ringdalskogen 8**  
**3270 Larvik**  
**Norway**

### ADDITIONAL INFORMATION

None.

## ANNEX 2 - SCHEDULE OF APPROVAL

### SCOPE OF EXAMINATION

<input checked="" type="checkbox"/> Protection of Health and Safety, according to Article 3(1)(a).	COMPLIES
<input checked="" type="checkbox"/> Electromagnetic Compatibility (EMC), according to Article 3(1)(b).	COMPLIES
<input checked="" type="checkbox"/> Radio Spectrum Use, according to Article 3(2).	COMPLIES
<input checked="" type="checkbox"/> Special Radio Features, according to Article 3(3)(a)-(f).	N/A

### APPLICATIONS/LIMITATIONS

No limitations

### MARKING OF PRODUCT

The Manufacturer and Type Designation shall be applied to the product in a visible location.  
 The equipment shall carry the CE marking of the European Union.

### TYPE EXAMINATION DOCUMENTATION

Article	Standard	Test report number	Issued by
3.1a	EN IEC 62368-1	REP007651	Nemko Scandinavia AS
	EN 50566 / EN 62209-2	CE SAR report_Trone SA20_ID5305	Verkotan, Finland
3.1b	ETSI EN 301 489 series	REP007296D	Nemko Scandinavia AS
	ETSI EN 301 843-1	REP007296D	Nemko Scandinavia AS
	IEC 60945	REP007296D	Nemko Scandinavia AS
3.2	ETSI EN 300 330	REP013038C	Nemko Scandinavia AS
	ETSI EN 303 413 V 1.2.1	REP007400C	Nemko Scandinavia AS
	ETSI EN 302 152-1	75956621 Report 02 Issue 1, Draft	TÜV SÜD
	Cospas-Sarsat T.007	75956621 Report 08 Issue 3	TÜV SÜD

#### Additional documentation

- RED technical file by Jotron dated: 2023-12-14

### ADDITIONAL INFORMATION

None.

#### Certificate Revision

Revision #	Date	Description
1.0	2023-12-19	First issued

<< End of certificate >>