



- ▶ 5 year warranty
- ▶ Compact design
- ▶ Tamper-proof
- ▶ Optimal visibility

# Tron 60S/GPS

FLOAT-FREE AND MANUAL EPIRB



## ▶ Tron 60S/GPS

Tron 60S/GPS is a compact and tamper-proof GMDSS EPIRB. This EPIRB complies to IMO, SOLAS regulation. With a high-intensity LED located at the top of the antenna, Tron 60S/GPS has optimal visibility. The EPIRB is supplied either with manual or float-free bracket.



Float-free bracket



Manual bracket

### SPECIFICATIONS

| TECHNICAL                 |   |
|---------------------------|---|
| Battery:                  | Lithium metal, 12V/2900 mAh<br>5 year service life      |
| Dimensions:               |   |
| • Height:                 | 340 mm  |
| • Diameter:               | 128 mm  |
| Weight:                   | 680 g   |
| Materials:                | Glass reinforced Polycarbonate                          |
| Compass safe distance:    | 0.85 m  |
| Temperature range:        | -20°C to + 55°C (operating)<br>-30°C to +70°C (storage) |
| Operating life:           | Minimum 48 hours at -20°C                               |
| Antenna:                  | Omnidirectional   |
| Cospas-Sarsat Transmitter |   |
| • Frequency:              | 406.037 MHz   |
| • Output power:           | 5W  |
| Homing transmitter        |   |
| • Frequency:              | 121.500 MHz   |
| • Output power:           | Up to 100 mW  |
| Protocols:                | Maritime, Serialized, Radio Call sign                   |
| Navigation device:        | 56 Channel GPS Receiver (Tron 60GPS)                    |
| ACCESSORIES               |   |
| Brackets:                 | Float-free: FB-60<br>Manual: MB-60                      |
| Battery:                  | Replacement kit   |
| Hydrostatic release:      | HRU kit   |
| WARRANTY                  |   |
|                           | 5 year warranty   |



# TECHNICAL BULLETIN TB09-2015 (Rev. 7)

## BATTERY LIFETIME ON BATTERY POWERED GMDSS PRODUCTS




We are a manufacturer that produces more than 25.000 EPIRB and SART battery packs (Lithium) every year. So batteries are never old in Jotron Stock. The battery types we use have less than 3% self-discharge per year,


Below is a list of shelf life and service life on our products

Definitions:

- Shelf life: The time the product may be in stock from manufacturing date until installed on a vessel
- Service life: The maximum lifetime the product can be labeled to (According to SOLAS req. of SBM)

| Product       | Shelf life (months)                | Service life (years) | Total (years) |     |
|---------------|------------------------------------|----------------------|---------------|-----|
| EPIRB         | Tron 30s                           | 12                   | 4             | 5   |
|               | Tron 40s/ Tron 40GPS               | 12                   | 5             | 6   |
|               | Tron 40s mkII/<br>Tron 40 GPS mkII | 12                   | 5             | 6   |
|               | Tron 60S / Tron 60 GPS             | 24                   | 5             | 7   |
|               | Tron 45 SX                         | 12                   | 5             | 6   |
|               | Tron S-VDR                         | 12                   | 5             | 6   |
|               | Tron 40VDR                         | 30                   | 5             | 7,5 |
|               | SART                               | Tron SART            | 12            | 4   |
| Tron SART20   |                                    | 18                   | 5             | 6,5 |
| Tron AIS-SART |                                    | 18                   | 5             | 6,5 |
| VHF           | Tron VHF                           | 12                   | 4             | 5   |
|               | Tron TR20 GMDSS                    | 18                   | 5             | 6,5 |
|               | Tron TR30 GMDSS                    | 30                   | 5             | 7,5 |

 Products with grey background are obsolete products

 Updated with extended shelf life

# UN 38.3 Test Summary Report

Lithium Cell or Battery Test Summary in Accordance with Section 2.9.4 UN Model Regulations and Sub-section 38.3 of the UN Manual of Tests and Criteria, Part III, subsection 38.3.5

[a]  Cell  Battery  Product  
 **Tested Type Part #** Jotron p/n 83095  
 **Same Type Part #** see list

[d] Unique report ID: 1236213 Rev.1

[e] Report date: Sep.2011

[b] **Manufacturer**

Jotron AS.

[c] **Test Laboratory**

Intertek House

**Same Type Part Numbers # (all):** Jotron p/n 83310 (Tron 60S EPIRB with Float-free Bracket), 83320 (Tron 60S EPIRB with Manual Bracket), 83330 (Tron 60GPS EPIRB with Float-free Bracket), 83340 (Tron 60GPS EPIRB with Manual Bracket), 86225 (Battery Kit Tron 60S/60GPS)

[f] (i)  Li-ion  Li-metal.

(iv) **Description:** Assembled from two AA/FR6 Energizer L91 cells in series(2s1P) in 4 separate 2s1p packs.

(ii) Mass: 145 g

(iii)  Watt hour rating or  Lithium content: 1.96 g x 4 = 7.84 g in total.

(v)  Cell  Battery  Product. Model number/Part number: 83095

[g] **List of Tests Conducted**

**Result (Pass / Fail / N.A.)**

**Test record reference**

| [g] List of Tests Conducted                      | Result (Pass / Fail / N.A.) | Test record reference |
|--|-----------------------------|-----------------------|
| 38.3.4.1 T.1: Altitude simulation                | Pass                        | Intertek 11053683     |
| 38.3.4.2 T.2: Thermal test                       | Pass                        | Intertek 11053683     |
| 38.3.4.3 T.3: Vibration                          | Pass                        | Intertek 11053683     |
| 38.3.4.4 T.4: Shock                              | Pass                        | Intertek 11053683     |
| 38.3.4.5 T.5: External short circuit             | Pass                        | Intertek 11053683     |
| 38.3.4.6 T.6: Impact/Crush (cell only test)      | Pass                        | Energizer 1118120077  |
| 38.3.4.7 T.7: Overcharge (N.A for Li-metal only) | N/A                         | N/A                   |
| 38.3.4.8 T.8: Forced discharge (cell only test)  | Pass                        | Energizer 1118120077  |

[h] Battery assembly:  Not Applicable.  UN38.3.3 (f)  UN38.3.3 (g)

[i] Test Reference: UN Manual of Tests and Criteria, Part III, sub-section 38.3 ST/SG/AC .10/11/Rev 5.

[j] Signatory A. Date: 04.12.2019

Name: Jan Erik Sæter

Title: Product Manager AIS & GMDSS

Signature:




**Important;** The above signatory/signatories affirm that this document is a true and correct summary of the original Individual tests and test data. Please note that any counterfeit batteries under Jotron product name and/or Jotron p/n do NOT comply to this document!