



KANNAD GADSS ELT-DT

Emergency Locator Transmitter Distress Tracking



Early Design Picture

The Kannad GADSS ELT-DT is a fixed Emergency Locator Transmitter – Distress Tracking type, designed to meet the ICAO GADSS Autonomous Distress Tracking requirement which will be applicable in January 2021.

Adaptable to any commercial aircraft, its programmable trigger-in-flight capability detects imminent distress situations and automatically sends a secure 406MHz distress signal including the accurate aircraft position.

Its operator ground activation service ensures that the aircraft is autonomously tracked and reporting a notification of distress to the relevant authorities.

Key features

- Compliant with the ICAO GADSS ADT regulation
- Programmable trigger-in-flight capability
- Remote ground activation via Return Link Service
- Internal multi-GNSS providing accurate and independent aircraft position
- Compliant with FAA/EASA special conditions for Lithium batteries
- Post-flight localization capability through enhanced mechanical robustness
- Easy avionics integration through compact design and direct connection to databus



Providing The ADT Function of GADSS

The *Kannad GADSS ELT-DT* is the world's first autonomous distress tracking solution which benefits from GALILEO and MEOSAR technologies, enabling the system to address imminent distress situations through smart innovations with global coverage:



Trigger-in-Flight capability – Based on programmable criteria, the *Kannad GADSS ELT-DT* automatically detects an imminent distress situation (according to flight events) which triggers beacon activation (or deactivation) any time during the flight in all conditions.



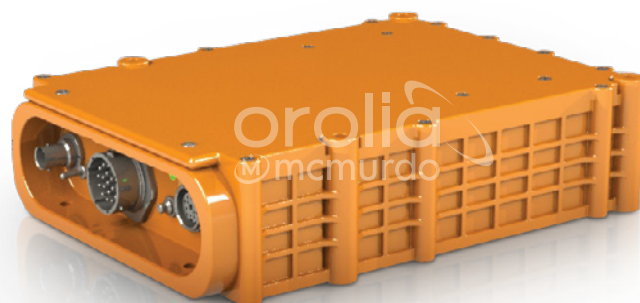
The Return Link Command Service enables an activation from the ground in case of an incertitude about the aircraft status or if attempts to communicate with the flight crew are unsuccessful.

The **instantaneous signal detection** of the *Kannad GADSS ELT-DT* provides the relevant authorities with a 406 MHz secured distress signal including the aircraft independent position which is refreshed 6 times during the first 30 seconds and then once each 30 seconds.

Once activated, the *Kannad GADSS ELT-DT* switches to a **self-sufficient battery mode** ensuring autonomous distress tracking, powering only the ELT-DT required functions. The system features a RS-422 output that provides status information such as activation status and cause.

In case of recovery from the distress situation, the *Kannad GADSS ELT-DT* smartly **deactivates** its distress signal.

Crash-resistant, the *Kannad GADSS ELT-DT* keeps transmitting the 406 MHz secured distress signal, including accurate GNSS location, in post-flight situations through its unique back-up antenna technology and a specific robust design.



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Approvals (pending):

TSO-C126b / ETSO-C126b
EUROCAE ED62 and EUROCAE ED14 RTCA
DO-204 and RTCA DO-160
COSPAS-SARSAT T series
DO-178, DO-254
EUROCAE ED237 compatible
TSO Non-rechargeable Lithium Batteries
TSO-C142b / ETSO-C142b

McMurdo's ADT Vision – Supported by the Industry

Oroliia, through its McMurdo brand, currently leads a consortium of well-established, proven European companies and industry experts as part of the HELIOS project. Their expertise in aircraft manufacturing, airline modifications, protective clothing design, search and rescue operations allows for the ongoing development of a second-generation distress tracking (DT) beacon, compliant with the ICAO GADSS concept of operation, applicable by January, 1st 2021. More info at www.helios-gsa-project.eu



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More information can be found on the *Kannad GADSS ELT-DT* product page or by emailing info@mcmurdogroup.com.

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Distress Beacons • Satellite Connectivity Infrastructure • Monitoring/Positioning Software • Emergency Response Management