

# Report on the EMC Testing of the Lars Thrane A/S LT-3100 Communication System In accordance with ETSI EN 301 489-1, ETSI EN 301 489-17 and ETSI EN 301 489-19

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## COMMERCIAL-IN-CONFIDENCE

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RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Adam Porteous	18 July 2018	
Authorised Signatory	Andy Lawson	18 July 2018	

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

### EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with ETSI EN 301 489-1: Draft V2.2.0 (2017-03), ETSI EN 301 489-17: Draft V3.2.0 (2017-03) and ETSI EN 301 489-19: Draft V2.1.0 (2017-03).



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## 1 Report Summary

### 1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	<> June 2018

**Table 1**

### 1.2 Introduction

Applicant	Lars Thrane A/S
Manufacturer	Lars Thrane A/S
Model Number(s)	LT-3110, LT-3120, LT-3121 and LT-3130
Serial Number(s)	00001669, 00001731, 00002078 and 00002282
Hardware Version(s)	Included in the Application software
Software Version(s)	1.01R
Number of Samples Tested	One System
Test Specification/Issue/Date	ETSI EN 301 489-1: Draft V2.2.0 (2017-03) ETSI EN 301 489-17: Draft V3.2.0 (2017-03) ETSI EN 301 489-19: Draft V2.1.0 (2017-03)
Test Plan/Issue/Date	Not Applicable
Order Number	QAF
Date	08-March-2018
Date of Receipt of EUT	16-March-2018
Start of Test	20-March-2018
Finish of Test	18-April-2018
Name of Engineer(s)	Paulo Nabais Rosa and Theodoros Skoulidakis
Related Document(s)	EN 55032: 2015 EN 61000-4-2: 2009 EN 61000-4-3: 2006 A1: 2009 A2: 2010 EN 61000-4-4: 2012 EN 61000-4-6: 2009

### 1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with ETSI EN 301 489-1, ETSI EN 301 489-17 and ETSI EN 301 489-19 is shown below.

Section	Specification Clause	Test Description	Result	Comments/Base Standard
Configuration and Mode: 12 V DC Powered, Receive Mode				
2.1	8.2	Radiated Emissions (Enclosure Port)	Pass	EN 55032
2.2	8.3	Conducted Emissions (DC Power Port)	Pass	EN 55032
2.3	8.7	Conducted Emissions (Telecommunication Port)	Pass	EN 55032
2.4	9.2	Immunity to Radio Frequency Electromagnetic Field (Enclosure Port)	Pass	EN 61000-4-3
2.5	9.5	Immunity to Radio Frequency, Common Mode	Pass	EN 61000-4-6
2.6	9.4	Immunity to Fast Transients, Common Mode	Pass	EN 61000-4-4
Configuration and Mode: 24 V DC Powered, Transmit Mode				
2.1	8.2	Radiated Emissions (Enclosure Port)	Pass	EN 55032
2.2	8.3	Conducted Emissions (DC Power Port)	Pass	EN 55032
2.3	8.7	Conducted Emissions (Telecommunication Port)	Pass	EN 55032
2.4	9.2	Immunity to Radio Frequency Electromagnetic Field (Enclosure Port)	Pass	EN 61000-4-3
2.5	9.5	Immunity to Radio Frequency, Common Mode	Pass	EN 61000-4-6
2.6	9.4	Immunity to Fast Transients, Common Mode	Pass	EN 61000-4-4

**Table 2**