



# Exhibit 12A Antenna Details

29th November 2022





# Introduction

This document provides details of the antenna types shown in the table below utilised in the rescueME PLB3 and ResQLink AIS (PLB-450) beacon products:

**Antenna Product Summary Table**

Ocean Signal Part Number	Antenna Type	Operating Frequency (MHz)	Gain dBi (Max)	Beacon Model
130S-03337	Retractable Monopole	121.5, 162, 406	1, -3, 6	rescueME PLB3, ResQLink AIS (PLB-450)
380-01213	18x18x2mm Ceramic Patch GNSS	1575.42	2	
381-04076	15x15mm -NFC (Near Field Communication)	13.56	N/A	

# rescueME PLB3 and ResQLink AIS (PLB-450) Beacon Products: Monopole Antennas Deployed



**PLB3**



**PLB-450**

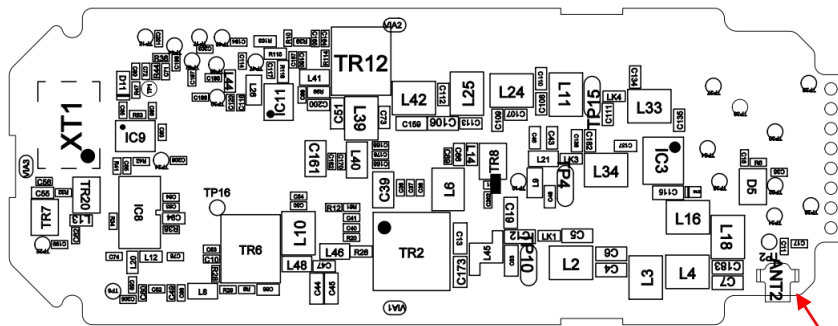
Operating Frequencies:  
121.5MHz  
406MHz  
162MHz (AIS)



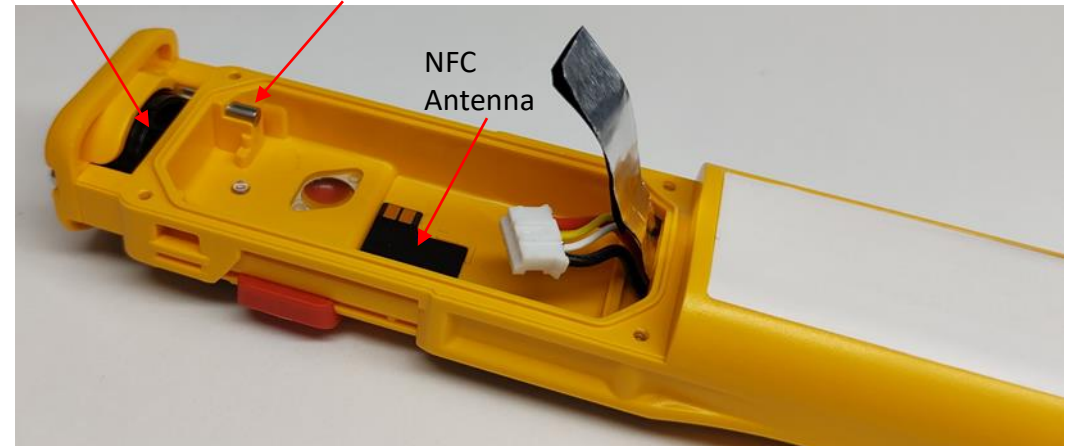
# Monopole Antenna Feed Connection Detail and NFC Antenna Position

Antenna (retracted)

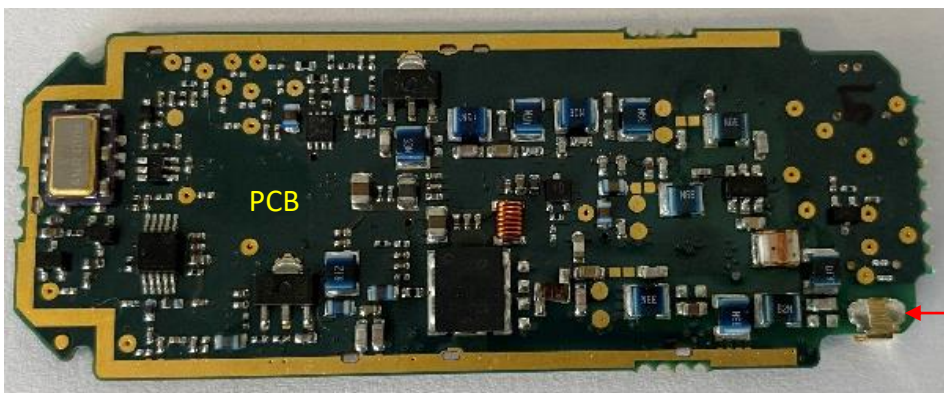
Antenna Pin Connection to Launch Spring Contact



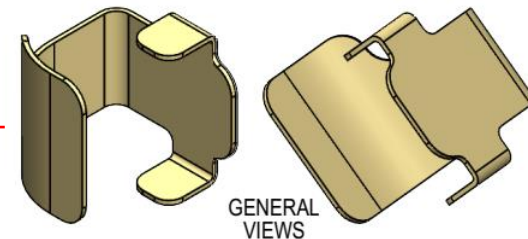
Antenna Launch Spring Contact (ANT2)



PLB3 With PCB Assembly Removed



Antenna Launch Spring Contact



**Note: The PLB-450 is identical in features and construction to the PLB3**



# GNSS and NFC Antenna Data Sheets



AEL Crystals Limited  
Unit 28, The IO Centre  
Salbrook Road  
Salfords  
Surrey  
RH1 5GJ - UK

Tel: +44 (0)1293 789200 (Main)  
Fax: +44 (0)1293 789490 (Main)

## Antenna Specification:

### 1 SCOPE

This specification shall cover the characteristics of the dielectric antenna element with the type A1573M753000L001

### 2 PART NO.

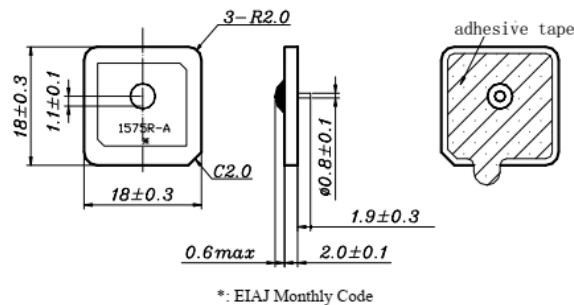
PART NUMBER	CUSTOMER PART NO	SPECIFICATION NO
A1573M753000L001		

### 3 OUTLINE DRAWING AND DIMENSIONS

3.1 Appearance: No visible damage and dirt.

3.2 The products conform to the RoHS directive and national environment protection law.

3.3 Dimensions



### 4 ELECTRICAL SPECIFICATIONS

#### 4.1 Performance Characteristics

Items	Content
Nominal frequency MHz	1575.42 ± 1.023
*Center frequency (with tape on 20×20mm ground plane)	1568.5 ± 3.0
Real Part Ω	95 ± 15

Both GPS and Galileo constellations are utilized for position fixing and RLS functionality respectively.



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PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

**Part Number:** **1462360151**  
**Status:** **Active**  
**Overview:** **Near Field Communication (NFC) Antennas**  
**Description:** Rectangular Near Field Communication (NFC) Antenna, with Ferrite, 15.00mm by 15.00mm by 0.27mm

**Documents:**  
3D Model  
3D Model (PDF)  
Drawing (PDF)  
Product Specification 1462360001-PS (PDF)  
Application Specification 1462360001-AS (PDF)  
Packaging Specification 1462360001-PK (PDF)  
Datasheet (PDF)  
RoHS Certificate of Compliance (PDF)



**General**  
Product Family: Antennas  
Series: 146236  
Component Type: FPC Coil Antenna  
Function: Signal  
Near Field Communication: Yes  
Overview: **Near Field Communication (NFC) Antennas**  
Product Name: NFC Antenna  
Protocol: NFC  
Type: NFC Antenna  
UPC: 193264146413

**Physical**  
Length: 15.00mm  
Mounting Style: Adhesive  
Net Weight: 0.198/g  
Packaging Type: PET Film  
Thickness: 0.27mm  
Width: 15.00mm

**Electrical**  
Electrical Connectivity: Copper Flex  
Frequency: 13.56 MHz  
Inductance: 2.10 µH

**Material Info**

**Reference - Drawing Numbers**  
Application Specification: 1462360001-AS  
Packaging Specification: 1462360001-PK  
Product Specification: 1462360001-PS  
Sales Drawing: 1462360001-000

**EU ELV**  
Not Relevant

**EU RoHS**  
Compliant

**China RoHS**  
REACH SVHC  
Contained Per -  
D(2020)9139-DC (19  
Jan 2021)  
2-methyl-1-(4-  
methylthiophenyl)-2-  
morpholinoprop  
Halogen-Free  
Status  
Low-Halogen

For more information, please visit [Contact US](#)

China RoHS: Green Image  
ELV: Not Relevant  
RoHS Phthalates: Not Contained

Search Parts in this Series  
146236 Series

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The beacon products are capable of connection to mobile devices (via a proprietary mobile app) using Near Field Communication (NFC). This enables the user to view limited but useful information about their product.

NFC technology allows communication between two electronic devices over a distance of 4cm (1.5") or less.