



LOW FREQUENCY RFID

125 KHz Reader with RS-485 Interface

Product Datasheet

MPN: - A-LRO4

INTRODUCTION

This document describes the functionality of the contactless reader **A-LRO4 125 KHz** modules. It includes the functional and electrical specification.

The **A-LRO4** is a highly integrated reader with 125 KHz in built antenna. The **A-LRO4** reader supports EMmarine Tag (125 KHz).The **A-LRO4** internal transmitter part is able to drive a reader antenna designed to communicate with EM-marine (125 KHz) cards and transponders without additional active circuitry. **A-LRO4** RFID Reader features an outstanding modulation and demodulation algorithm to serve effortless RF communication.

Various interfaces are Available:

- ✓ Serial UART (A-LRO1)
- ✓ RS-485 interface (A-LRO4)
- ✓ RS-232 interface (A-LRO2)

FEATURES

- ✓ Support EM-marine Tag (125 KHz)
- ✓ Fast data transfer contactless communication
- ✓ Secure-Encrypted Manchester Decoding
- ✓ Typical operating distance in reader up to 35mm depending on the antenna size and tuning.
- ✓ In built 125KHz Antenna
- ✓ Support MODBUS ASCII/RTU communication protocol
- ✓ Used timer for Holding data into memory (it can customizable while configuring device)

SPECIFICATION		
Country of origin	India	
Operating Frequency	125 KHz	
Baud Rate Support	9600	
Reader Distance	Up to 30mm	
Interface	RS-485	
Card/ Tag Supported	EM-marine 125KHZ	
Operating Voltage	9V – 36V	
Operating Current	40mA @12V – 24V	
Operating Temperature	0°C to 65°C	
Storage Temperature	0°C to 65°C	
Relative Humidity	5% - 95%	
Tag Detection	Based on command	
Indication	LED ,Buzzer	

COMMANDS

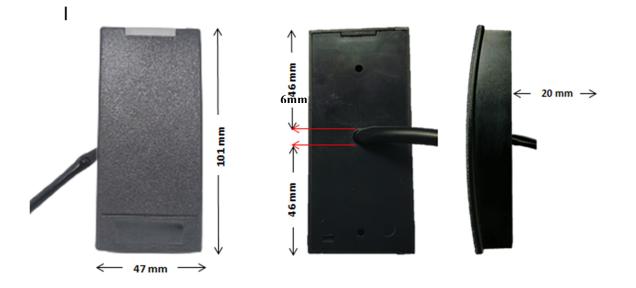
Note 1 The following commands are specific to Avyanna Tech Pvt. Ltd (ATPL) RFID 125 KHz products (A-LRO4) and are not applicable to other products.

Note 2: Below mention commands are in hexadecimal format.

For more details please refer user manual.

Command/FC ASCII	Command/Function Code RTU	Description
0X42 'B'	-	Get factory code
0X44 'D'	-	Get Module ID
0X46 'F'	0x03	Read card/tag ID
0X47 'G'	-	Re-Read card/tag ID





ORDERING INFORMATION	
MPN	Description
A-HRO4	RFID 125 KHz based read only module with RS485 Interface

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A-LRO4_1.0 RFID 485 datasheet