# AN01700

# LoRaWAN AT Command Firmware Complete

V1.2

#### **Document information**

Info	Content
Keywords	LoRaWAN, AT Command, UART, USB
Abstract	This document defines AT command format used by RisingHF LoRaWAN module

## **1** Features

Version	LoRaWAN	Class	Flash Size	Features	Documentation
V1.9.4	v1.0	A/C	64KB		PS01509-V2.x
V2.0.x	v1.0.1	A/C	64KB		PS01509-V3.x
V2.1.x	v1.0.2	A/C	64KB		PS01509-V4.x
V2.2.x	v1.0	A/C	64KB	CLAA	PS01509-V3.1 UM11607
V3.x.x	v1.0.2 & V1.0.2B	A/B/C	128KB		PS01709

## 2 Part Number

#### 2.1 Hardware Resources

Part Number			868/915MHz	AT Modem
		TX Power (dBm)	TX Power (dBm)	
RHF76-052A	ROM 64KB / RAM 8KB	19	14	No
RHF76-052C	ROM 64KB / RAM 8KB	NA	19	No
RHF76-052D	ROM 128KB / RAM 20KB	19	14	No
RHF78-052A	ROM 64KB / RAM 8KB	19	NA	No
RHF78-052D	ROM 128KB / RAM 20KB	19	NA	No
RHF76-052AM	ROM 64KB / RAM 8KB	19	14	Yes
RHF76-052CM	ROM 64KB / RAM 8KB	NA	19	Yes
RHF76-052DM	ROM 128KB / RAM 20KB	19	14	Yes
RHF78-052AM	ROM 64KB / RAM 8KB	19	NA	Yes
RHF78-052DM	ROM 128KB / RAM 20KB	19	NA	Yes
RHF0M003LF	ROM 128KB / RAM 20KB	19	NA	Yes
RHF0M003HF	ROM 128KB / RAM 20KB	NA	19	Yes
RHF3M076	ROM 64KB / RAM 8KB	19	14	Yes
RHF3M076B	ROM 128KB / RAM 20KB	19	14	Yes
RHF3M072	ROM 128KB / RAM 20KB	19	14	Yes

## 2.2 Firmware Series

Part Number	Flash Size	Interface	V1.9.4	V2.0.x	V2.1.x	V2.2.x	V3.x.x	Status
RHF76-052AM	64KB	UART		Yes	Yes	Yes		Active
RHF76-052CM	64KB	UART		Yes	Yes			Active
RHF76-052DM	128KB	UART		Yes	Yes		Yes	Active
RHF78-052AM	64KB	UART		Yes	Yes			Active
RHF78-052DM	128KB	UART		Yes	Yes		Yes	Active
RHF3M076	64KB	USB	Yes					Obsolete (Replaced by RHF3M076B)
RHF3M076B	128KB	USB	Yes		Yes		Yes	Active
RHF3M072	128KB	UART			Yes		Yes	Active

# RisingHF

#### LoRaWAN AT Command Firmware Complete

Part Number	Flash Size	Interface	V1.9.4	V2.0.x	V2.1.x	V2.2.x	V3.x.x	Status
RHF0M003LF	128KB	UART			Yes		Yes	Active
RHF0M003HF	128KB	UART			Yes		Yes	Active

### Revision

V1.2 2018-01-26

+ Added RHF0M003xx

V1.1 2017-07-22

- + Added Hardware Resources and Firmware Series
- + Added more part numbers

V1.0 2017-06-02

+ First version

#### **Please Read Carefully:**

Information in this document is provided solely in connection with RisingHF products. RisingHF reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All RisingHF products are sold pursuant to RisingHF's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the RisingHF products and services described herein, and RisingHF assumes no liability whatsoever relating to the choice, selection or use of the RisingHF products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by RisingHF for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN RISINGHF'S TERMS AND CONDITIONS OF SALE RisingHF DISCLAIMS ANY EXPRESS OR IMPLIEDWARRANTY WITH RESPECT TO THE USE AND/OR SALE OF RisingHF PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIEDWARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWSOF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

RISINGHF PRODUCTS ARE NOT DESIGNED OR AUTHORIZED FOR USE IN: (A) SAFETY CRITICAL APPLICATIONS SUCH AS LIFE SUPPORTING, ACTIVE IMPLANTED DEVICES OR SYSTEMS WITH PRODUCT FUNCTIONAL SAFETY REQUIREMENTS; (B) AERONAUTIC APPLICATIONS; (C) AUTOMOTIVE APPLICATIONS OR ENVIRONMENTS, AND/OR (D) AEROSPACE APPLICATIONS OR ENVIRONMENTS. WHERE RISINGHF PRODUCTS ARE NOT DESIGNED FOR SUCH USE, THE PURCHASER SHALL USE PRODUCTS AT PURCHASER'S SOLE RISK, EVEN IF RISINGHF HAS BEEN INFORMED IN WRITING OF SUCH USAGE, UNLESS A PRODUCT IS EXPRESSLY DESIGNATED BY RISINGHF AS BEING INTENDED FOR "AUTOMOTIVE, AUTOMOTIVE SAFETY OR MEDICAL" INDUSTRY DOMAINS ACCORDING TO RISINGHF PRODUCT DESIGN SPECIFICATIONS. PRODUCTS FORMALLY ESCC, QML OR JAN QUALIFIED ARE DEEMED SUITABLE FOR USE IN AEROSPACE BY THE CORRESPONDING GOVERNMENTAL AGENCY.

Resale of RisingHF products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by RisingHF for the RisingHF product or service described herein and shall not create or extend in any manner whatsoever, any liability of RisingHF.

RisingHF and the RisingHF logo are trademarks or registered trademarks of RisingHF in various countries. Information in this document supersedes and replaces all information previously supplied. The RisingHF logo is a registered trademark of RisingHF. All other names are the property of their respective owners.

© 2015 RISINGHF - All rights reserved

http://www.risinghf.com