UM01516

LoRaWAN Modem Driver Installation Guide

V1.1

Document information

Info	Content
Keywords	LoRaWAN, USB CDC
Abstract	This doc shows how to install Windows driver for LoRaWAN modem (RHF3M076)

Content

Content	2
Figures	3
1 Preface	1
2 How To	2
2.1 Open Device Manager	2
2.2 Find LoRaWAN modem and install driver	2
2.3 Browse my computer for driver software	3
2.4 Confirm to install this driver software	4
2.5 Finish	5
3 FAQ	7
Revision	8

Figures

Figure 2-1 Device Manager	2
Figure 2-2 Device RisingHF LoRaWAN Modem	2
Figure 2-3 Install Local Driver Manually	3
Figure 2-4 Locates Driver Directory	3
Figure 2-5 Ignore Windows Security Warning	4
Figure 2-6 Installing Driver	4
Figure 2-7 Installation Finish	5
Figure 2-8 LoRaWAN Modem is Ready to Use	5
Figure 2-9 Enjoy LoRaWAN Modem with Serial Terminal	6
Figure 3-1 STM Virtual COM Port	7

1 Preface

LoRaWAN modem¹ is a plug and play device. It is a standard USB CDC² device, for Linux or MAC operating system, there is no driver needed; user could control it just like any other USB CDC device. But for Windows system, a driver is necessary in order to start play with LoRaWAN modem. This guide only shows user how to install driver for LoRaWAN modem, for command usage please refer to PS01509³.

¹ RisingHF part number of LoRaWAN modem is RHF3M076, customer could use this part number to take order

² USB Communication Device Class

³ RHF-PS01509: LoRaWAN AT Command Specification

2 How To

2.1 Open Device Manager

Control Panel (3)
📇 Device Manager
kai View devices and printers
🚔 Update device drivers
₽ See more results
device manager] × Shut down +

Figure 2-1 Device Manager

2.2 Find LoRaWAN modem and install driver

A Device Manager
File Action View Help
🔈 📲 Display adapters 🔹
🛛 🖓 Human Interface Devices
D - Controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters Right click LoRaWAN Modem Device
Other devices
RisingHF LoRaWAN Mod
Ports (COM & LPT)
USB Senal Port (COM3) Disable
····································
Processors Scan for hardware changes
Sound, video and game cont
Storage controllers Properties
> 📲 System devices
Universal Serial Bus controllers
aunches the Update Driver Software Wizard for the selected device.

Figure 2-2 Device RisingHF LoRaWAN Modem

2.3 Browse my computer for driver software

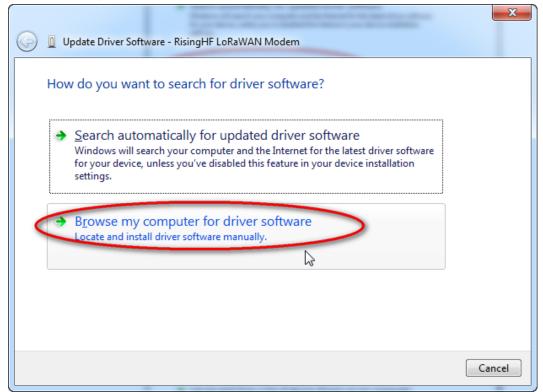


Figure 2-3 Install Local Driver Manually

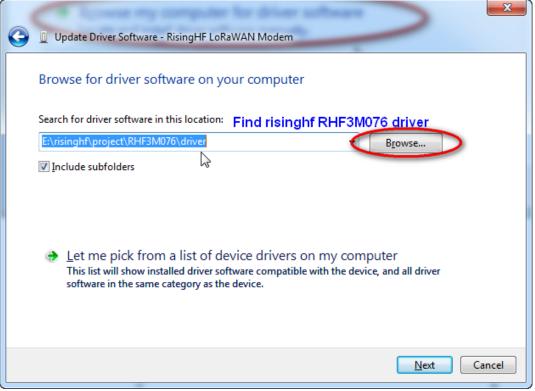


Figure 2-4 Locates Driver Directory

2.4 Confirm to install this driver software

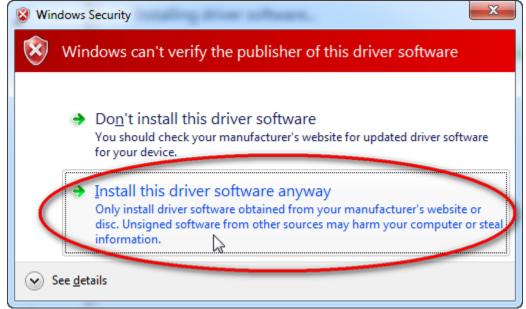


Figure 2-5 Ignore Windows Security Warning⁴

Update Driver Software - RisingHF LoRaWAN Modem	x
Installing driver software	

Figure 2-6 Installing Driver

⁴ RisingHF LoRaWAN Modem will never hurt your PC

2.5 Finish

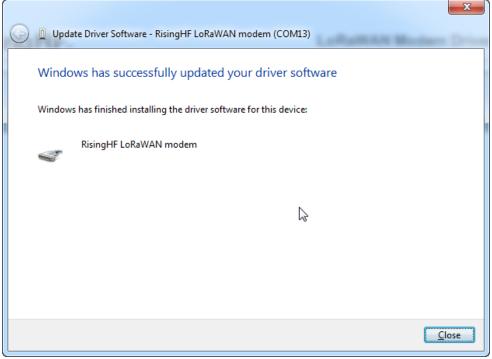


Figure 2-7 Installation Finish

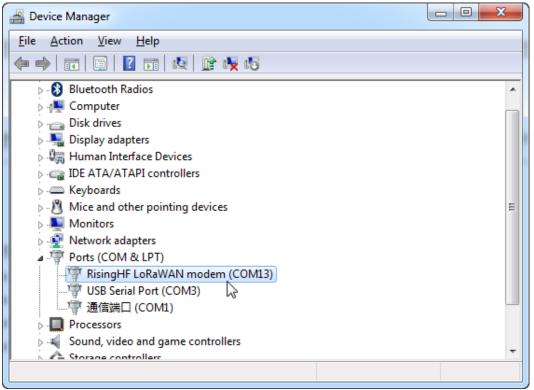


Figure 2-8 LoRaWAN Modem is Ready to Use

i 🖡 SSCOM3.2	x
+HELP: OK AT Test command RESET Software reset COM DATA MSG LoRaWAN unconfirmed data HEX DATA S MSGHEX LoRaWAN unconfirmed data in hex AT+FDEFAULT=risingHF AT+HELP=? CMSG LoRaWAN confirmed data AT+HELP=? AT+HELP=? CMSGHEX LoRaWAN confirmed data AT+HELP=? AT+HELP=? CMSGHEX LoRaWAN confirmed data AT+HMSG="LoRa" AT+HMSG="LoRa" ADR LoRaWAN control FREQ LoRaWAN channel frequency AT+HMSGHEX="0011223300112233" DR Same as "SF" AT+FCMSGHEX=00 11 22 330 AT+TEST=? REPT Unconfirmed message repetition AT+FREQ=? AT+HMODE=? POWER LoRaWAN TX power AT+FMODE=? AT+HMODE=? RXWINZ LoRaWAN TX power AT+HMODE=TEST AT+MODE=LWABP FDEFAULT Factory data reset DFU Force bootloader to enter dfu mode AT+HELP AT+HELP MDE LWASP, LWOTAA, TEST TEST Test commands CLASS Choose LORaWAN modem class (A/B/C) Round send, interval: 1000	SEND 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ms
OpenFile FileNm SendFile SaveData Clear HexData	
ComNum COM13 CloseCom Help WWW.MCU51.COM Hide BaudRa 115200 DTR RTS DataBi Send eve 100 ms/Time StopBi SendHEX SendNew Verifyl None Data input: SEND FlowCop None AT+HELP=? vww.mcu51.con S:11 R:859 COM13 opened 115200bps & CTS=0 DSR=0 RLSD=0	

Figure 2-9 Enjoy LoRaWAN Modem with Serial Terminal

3 FAQ

1. Why my LoRaWAN Modem is recognized as "STM Virtual COM" device?

a 🖤 Ports (COM & LPT)

STMicroelectronics Virtual COM Port (COM60)

Figure 3-1 STM Virtual COM Port

In some cases, your modem may be recognized as STM Virtual COM Port, this is normal, as LoRaWAN modem uses STM32 MCU and ST's CDC VID and PID. This does not affect the performance and any feature of the modem.

Revision

V1.1 2015-07-12 + Add FAQ

V1.0 2015-04-25 + First Release

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