



INSTALLATION AND OPERATION
QUICK GUIDE

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UM220-IV L

Navigation and Positioning Module Evaluation Kit

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Revision History

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R1.0	First release	2022-03-21

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Foreword

This document describes the product features and information of UNICORECOMM UM220-IV L EVK. The document can be used together with *uSTAR Instructions*.

Target Readers

This manual is created for the technical personnel, who possess the expertise of GNSS products.



Contents

1	Overview	1
2	Composition	1
3	Interfaces.....	2
4	Indicators	3
5	Connection and Configuration	3

1 Overview

UM220-IV L evaluation kit (hereinafter referred to as EVK board), is mainly used to test and evaluate the function and performance of UM220-IV L module for user's convenience.

2 Composition

UM220-IV L EVK board consists of the NPL_EVK_SWITCH3V3_L board and the NPL-EVK board. See the pictures below:

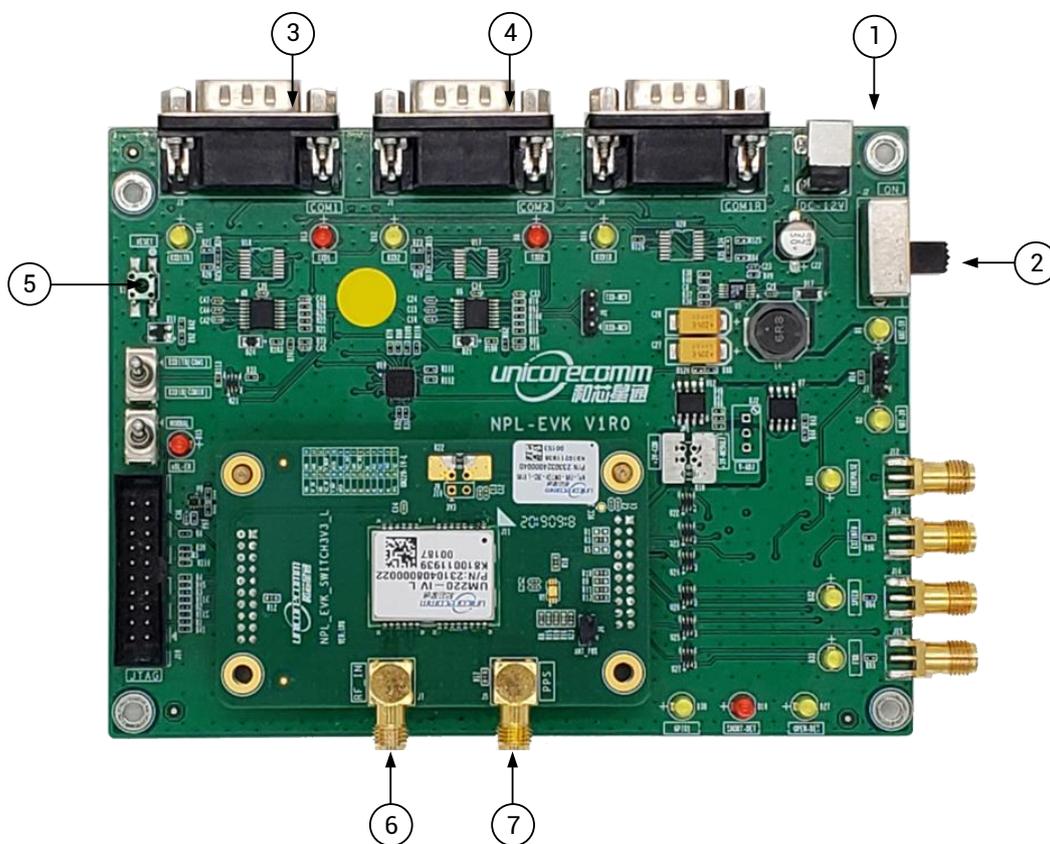


Figure 2-1 UM220-IV L EVK Board

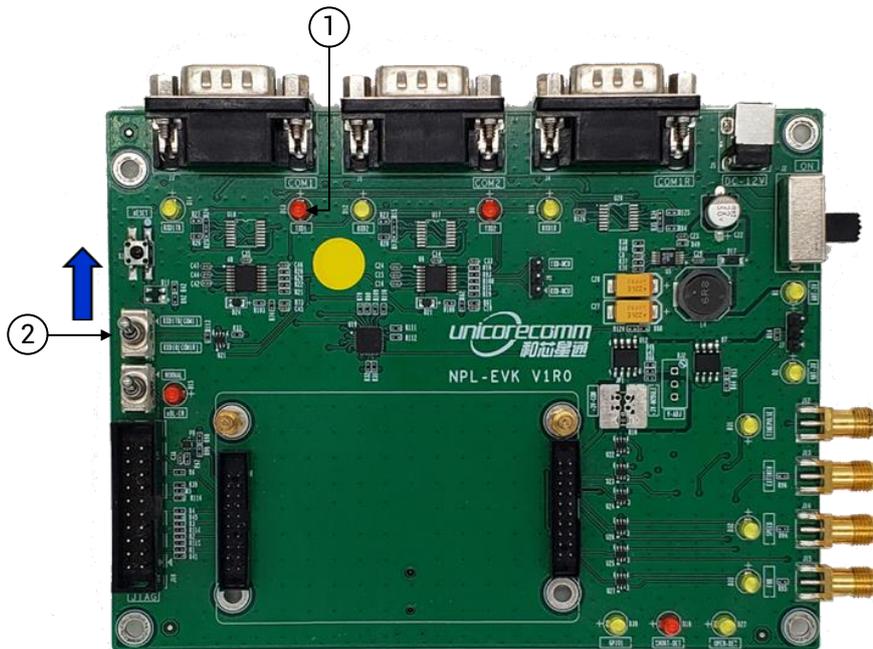


Figure 2-2 NPL-EVK Board



Figure 2-3 3V3-L Board

3 Interfaces

The interfaces of UM220-IV L EVK board are shown in Figure 2-1 UM220-IV L EVK Board, and the detailed description is shown in Table 3-1.

Table 3-1 Interfaces of UM220-IV L EVK Board

Interface	Type	Description
1	Power	+12V power adapter interface

Interface	Type	Description
2	Switch	Power on/off
3	Serial Port	COM1, for both data transmission and upgrade
4	Serial Port	COM2, for data transmission only
5	RESET	System reset
6	RF_IN	RF signal input; this interface connects to the antenna.
7	PPS	PPS port

4 Indicators

The indicators of UM220-IV L EVK board is shown in Figure 2-2 NPL-EVK Board, and the detailed description is shown in Table 4-1.

Table 4-1 Indicators of UM220-IV L EVK Board

Indicator	Description	Quantity
1	COM1 serial port indicator. The indicator goes on when data transmission is normal; the indicator goes off when data transmission is abnormal.	1

Note:

As shown in the Figure 2-2 NPL-EVK Board, before powering on the NPL-EVK board, move the switch ② to the direction of the serial ports to ensure normal data transmission.

5 Connection and Configuration

Step1: Align the NPL_EVK_SWITCH3V3_L board with the positioning holes and pins of NPL-EVK board, and install it on the NPL-EVK board.

Step2: Referring to Figure 2-1 UM220-IV L EVK Board, connect the serial port, antenna and power.

Step3: Install the jumper cap on J4 (ANT_PWR) of NPL_EVK_SWITCH3V3_L board to provide 3 V power supply for the antenna.



Figure 5-1 J4 on 3V3-L Board

Step4: Move the switch ② of the NPL-EVK board to the direction of the serial ports, see Figure 2-2 NPL-EVK Board.

Step5: Power on the UM220-IV L EVK board and input command: \$CFGANT,1 to enable the antenna feeding (antenna feeding is disabled by default).

Step6: Save the configuration: \$CFGSAVE.

和芯星通科技（北京）有限公司

Unicore Communications, Inc.

北京市海淀区丰贤东路 7 号北斗星通大厦三层
F3, No.7, Fengxian East Road, Haidian, Beijing, P.R.China,
100094

www.unicorecomm.com

Phone: 86-10-69939800

Fax: 86-10-69939888

info@unicorecomm.com



www.unicorecomm.com