

# YIC



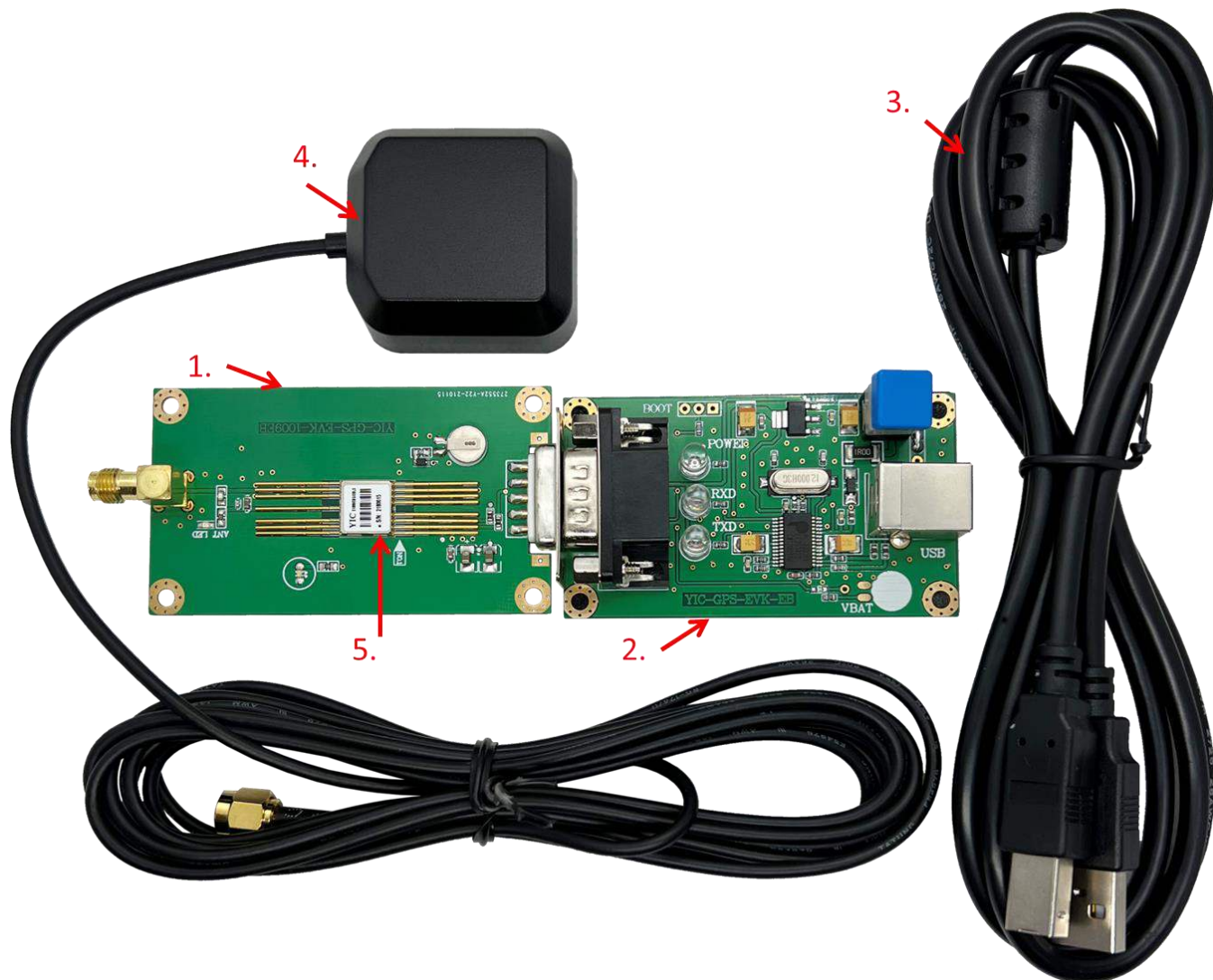
## Evaluation Kit for YIC51009EB Series

**EVK-YIC51009EBGGBL5**

## User Guide


[www.yic.com.tw](http://www.yic.com.tw)

## 1. Contents of EVK-YIC51009EBGGBL5



	Item	Description
1.	YIC-GPS-EVK-1009EB	Main Board
2.	YIC-GPS-EVK-1009EB	Adaptor Board
3.	USB Cable	USB Type B to USB Type A
4.	ATGGL54138M-SMA-3	Dual Band GNSS L1+L5 Antenna
5.	YIC51009EBGGBL5	Sub-1 Meter L1 + L5 GNSS Module

## 2. Install the PL2303 USB driver to PC

 PL2303\_Prolific\_DriverInstaller\_v1210.exe

2.1 Install the PL2303 USB driver, open the computer control panel, check the corresponding serial port.

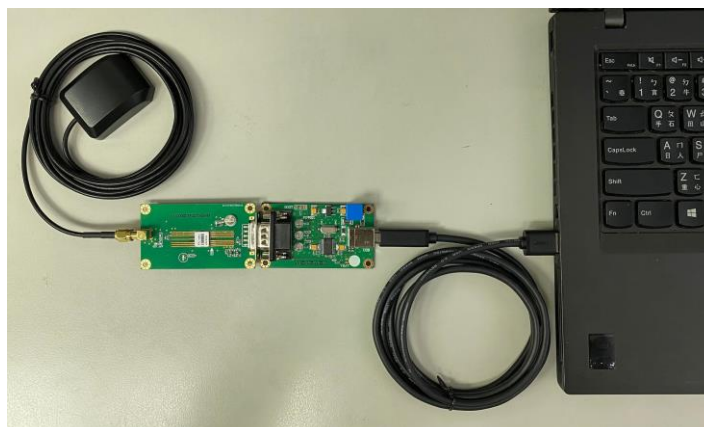


## 3. Connection diagram

3.1 Carefully slide the DUT GPS module into main board, pin 1 of the module corresponds to the arrow on main board.



3.2 Test connection



## 4. Install test software & start

### 4.1 For YIC51009EB series (MediaTeK chip based)

#### 4.1-1 Install test software: GNSS Viewer

#### 4.1-2 Software setting

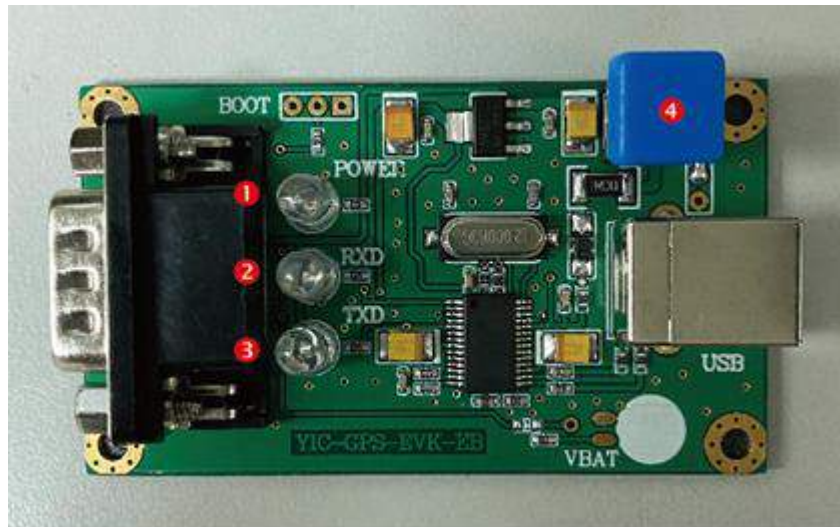
- ① Select the corresponding serial port
- ② Select the corresponding baud rate (9600 or 115200,.....)
- ③ Click Connect to start the test

The screenshot shows the GNSS Viewer Customer Release V2.0.120 for Venus 8 interface. Key elements include:

- Com Port:** COM5 (indicated by a red circle 1)
- Baudrate:** 9600 (indicated by a red circle 2)
- Connect:** Button (indicated by a red circle 3)
- Message:** NMEA output statement (indicated by a red box and arrow)
- Positioning time:** TTFF: 10, Date: 2021/01/27, Time: 01:29:07 (indicated by red boxes)
- UTC time:** Time: 01:29:07 (indicated by a red box)
- Satellite Status:** Bar chart showing GPS and GLONASS satellites. Red arrows point to the Beidou and Galileo sections, with labels "GPS satellite positioning information" and "GLONASS satellite positioning information".
- Earth View:** 3D globe showing satellite positions.
- Scatter View:** 2D plot of satellite positions with a scale of 1m.
- Coordinate:** WGS84\_X, Y, Z and EAST, NORTH, UP values.
- Command:** Buttons for Hot Start, Warm Start, Cold Start, No Output, NMEA0183, Binary, Scan All, Scan Port, Scan Baud.

## 5. LED and Push Button description

### 5.1 Adaptor Board



- ① Red LED: POWER, always on when power on
- ② Blue LED: RXD, often light while DUT GPS module receiving data
- ③ Green LED: TXD, flash once per second when DUT GPS module start sending data
- ④ Push Button: POWER, push to power on and off the EVK

### 5.2 Main Board

PPS LED: Flash once per second after satellite position fixed