

**Sirius Fly-Band 46  
(T99B123.00)  
User Manual**

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- Revision History

Date	Author	Revision	Remark
2018/09/05	Simon Xiao	0.1	Initial Version

# **1 Purpose**

This document is a brief introduction on Wireless Data Transfer Unit (DTU, Sirius Fly) Installation and setup.

## 2 Appearance introduction

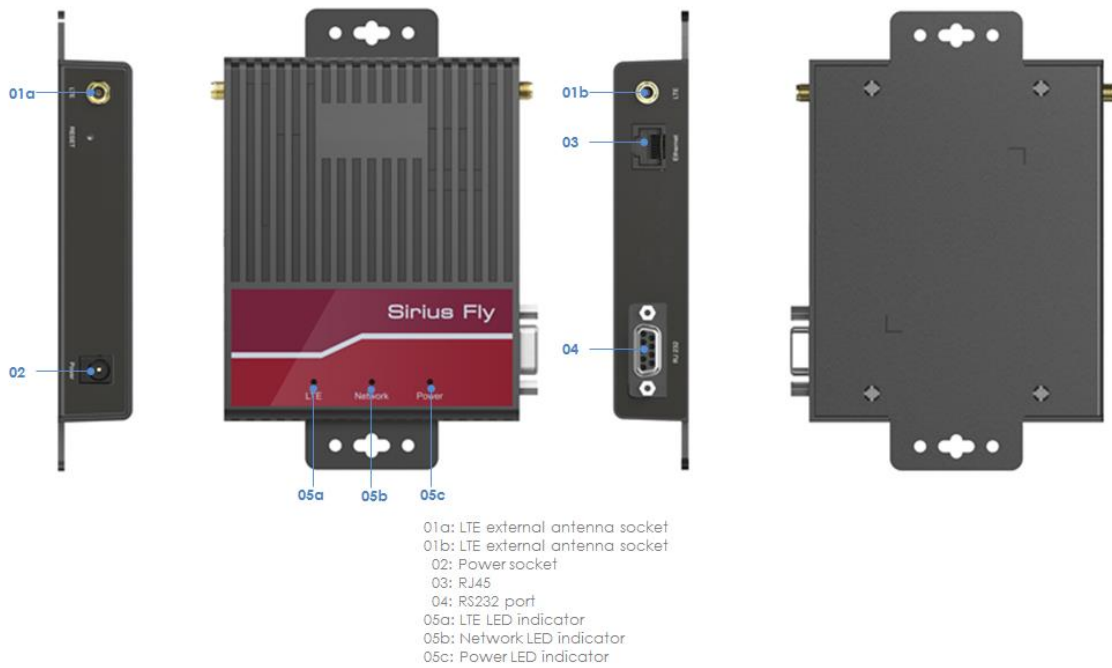


Figure 1 Appearance

Table 1 Product Specification

Radio	LTE TDD	
	Frequency	B46(5150~5250MHz, 5725~5850MHz)
	Sensitivity	-95dBm
Hardware Configuration	MU-MIMO	1T x 2R
	LAN	10/100/1000 Base-T Ethernet RJ45
	RESET	External Access
	Antenna	2 * external LTE Antenna
	Power	12V DC/1.5A input
	Memory	EMMC (DDR2 2Gbits, NAND 2Gbits)
	LED	3 Single-Color Status LEDs
	IO Port	RS-232 (baud rate: 9600 ~ 230400)
Antenna	Type	External LTE Antenna
	Gain	2dBi
	Isolation	20dB
Throughput	TDD Configuration 1 70Mbps(DL), 20Mbps(UL)	
Power	<5W	
Dimension	152mm x 97.5mm x 25mm	
Weight	<150g	
Environmental	Working temperature	0°C ~ +55°C, Storage humidity: 5% ~ 95%
	IP rating	IP3x
	Mounting	Wall

### 3 Overview

#### 3.1 Setup steps

The installation and setup of the DTU easy, Only need user to configure the FeMS URL and APN parameters by manual configuration on the DTU. The other configuration data will be provisioned from remote management system.

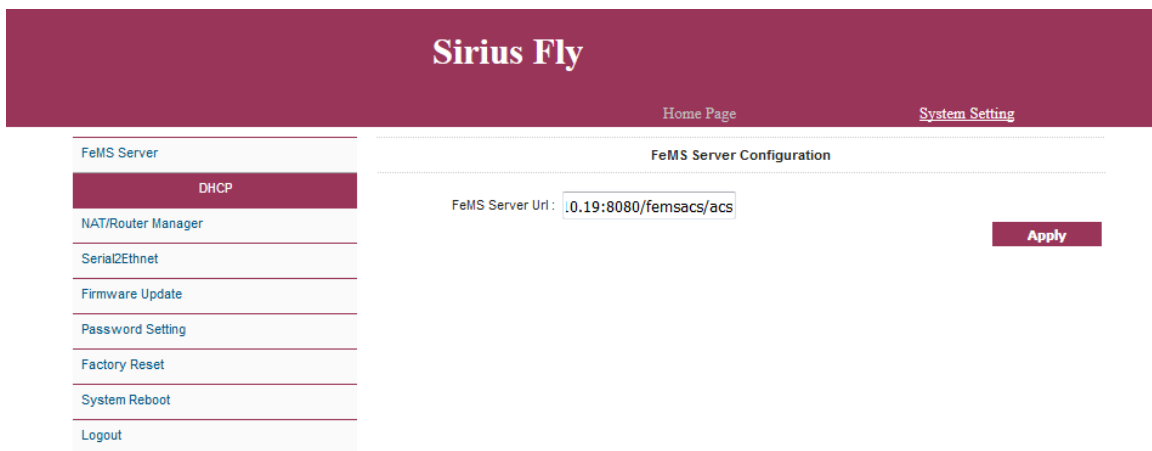
Steps for complete installation is as below

Step1. Unpack DTU

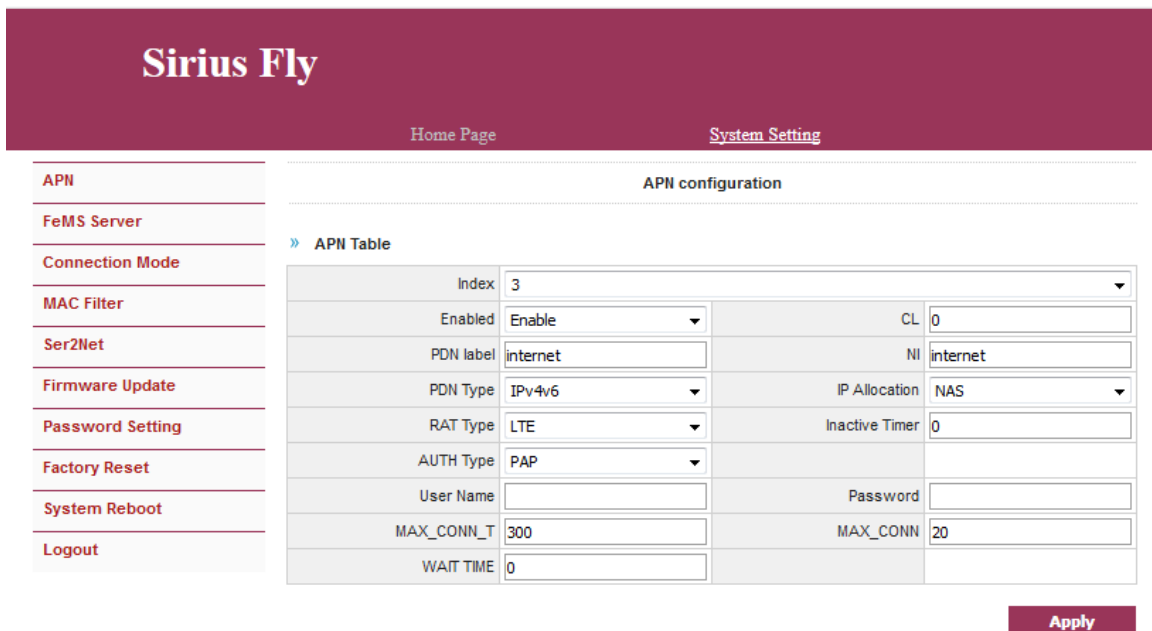
Step2. Put DTU at where Small cell signal is good, and power on DTU.

Step3. Connect your PC to DTU RJ45 port with Ethernet cable.

Step4. Login webgui(<http://192.168.0.1,username:user,password:user>), and set your FeMS server URL as below:  
(system settings → FeMS server)



Step5. Configure APN.



Step6. Wait for Power, Network, LTE LED turns solid green

### 3.2 Wireless Data Transfer Unit setup illustration

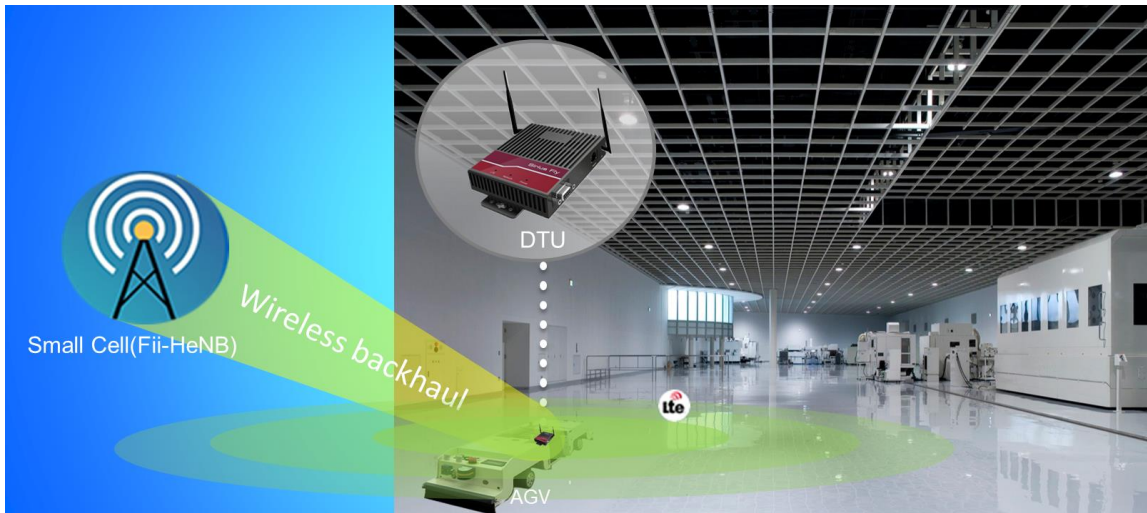


Figure 2 Composition of setup

## 4 LED

### 4.1 LED indication definition and color

LED color	Item
●	Off
●	Green Solid
★	Green blink

### 4.2 DTU LED indication

The DTU LED indicates the information of DTU Connectivity and Alarm

Only LTE LED information includes alarm.

LED color	LED	Item	Description
●	Power	Off	Power off
●	Power	Green Solid	Power on
●	LTE	Off	Has no LTE connectivity
●	LTE	Green Solid	Has LTE connectivity
★	LTE	Green blink	For alarm indication:Unplug U-SIM
●	Network	Off	RJ45 network linkdown
●	Network	Green Solid	RJ45 network linked
★	Network	Green blink	RJ45 network port is under data transmitting

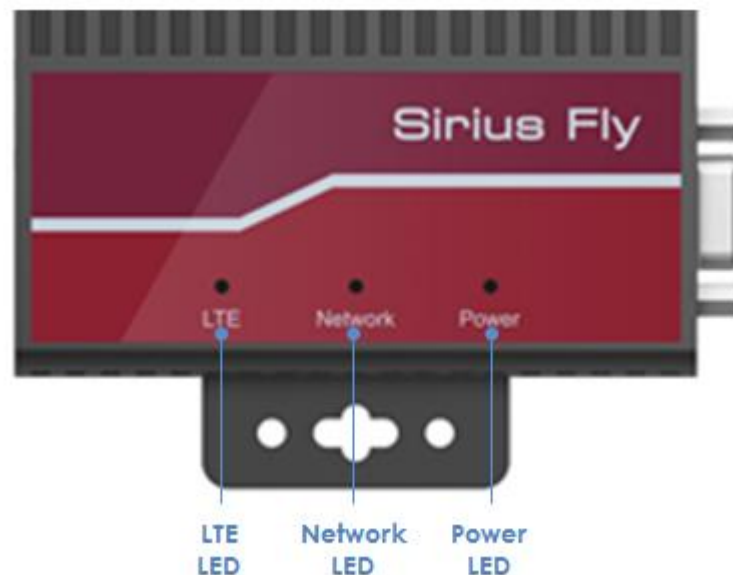


Figure 3 LED indication



## 5 Environment Condition

### 5.1 Operating Temperature Condition

Condition: 0 ~ 55 degrees C

The product shall be capable of continuous reliable operation when operating in ambient temperature of 0 degree C to +55 degree C.

### 5.2 Operating Humidity Condition

Condition: 5 ~ 95%RH (Must be no condensation)

The product shall be capable of continuous reliable operation when subjected to relative humidity in the range of 5% and 95% non-condensing.

**Cautions:**

- Do not place the device in an environment which is with high humidity.  
Damped device may make humans in danger.
- When the thunder or storms, do not touch cable in case of short.
- Do not plug the cables or adaptors which are not defined in the package.
- Do not bend the LAN cable or AC Adaptor cable.
- Do not strongly knock the device.
- Do not place the device on the top of paper materials.
- Do not place the device where is unstable. Device maybe broken due to falling or striking.
- Do not lay down the device or pile with other electronic devices.
- Do not place the device in a high temperature environment or near windows.

## **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA

# Professional installation instruction

## 1. Installation personal

This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

## 2. Installation location

The product shall be installed at a location where the radiating antenna can be kept 20cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

## 3. External antenna

Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited.

## 4. Installation procedure

Please refer to user's manual for the detail.

## 5. Warning

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.