

# GG863-SR Getting Started User Guide





This document is related to the following product :

Short Range to GSM   GPRS Gateways	
Terminal	
<b>GG</b> 863-SR	: 🛞 🖂 : 🛞
Gateway	



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# CHAPTER I.

# INTRODUCTION

### I.1. Aim of the Document

The goal of this document is to show the customers how to start-up the Demo on the GG863-SR describing all the necessary hardware, installation procedures and configuration of both GG863-SR and PC.

#### I.2. Reference documents

[1] GG863-SR Software User Guide	1vv0300836
[2] GG863-SR Product Description	80322ST10058
[3] GG863-SR Hardware User Guide	1vv0300835
[4] GE863-PRO <sup>3</sup> Linux SW User Guide	1vv0300781

### I.3. Document change log

Revision	Date	Changes	
ISSUE # 0	07/09/10	First Release	



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#### CHAPTER II. LOCAL CONNECTION GG863-SR<->IP HOST

# **II.1. Introduction**

In this chapter is described how to start the demo application in case of the local connection between PC and GG863-SR. PC hosting Demo Application should be connect to the GG863-SR through the USB connection.

# II.2. Gateway Configuration for Local Connection

Before starting make sure that Linux USB Ethernet/RNDIS Gadget (necessary to recognize the GG863-SR) is installed (more details can be found in [1] paragraph 2.4.5).

Follow the Configuration Gateway phase to set the parameters needed to connect the IP Host to the GG863-SR.

- Turn on the GG863-SR and wait 20 seconds for the system to boot
- Connect the GG863-SR to a local PC (see [1] paragraph 2.4.5)
- In the local PC connected to the GG863-SR type the address:

http://192.168.121.3/cgi-bin/index.cgi

where 192.168.121.3 is one of the IP addresses of the GG863-SR.

Note1: IP address 192.168.121.3 (defined in [1]) can also be changed (see [4])

Note2: Although the connection will be established only local it is necessary to insert the SIM card in the GG863 to make it work correctly. Before inserting the SIM card in GG863 make sure that PIN is deactivated.

PRODUCT NAME Administration	Panel - Windows Internet Explorer		
💽 🗸 🖉 http://192.168.121.3	/cgi-bin/index.cgi	V Search	<b>P</b> -
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You can see the Home Page of the Web Administration Panel (allows to configure parameters of the server-IP host that will be used by Auto Application to establish the connection such as IP address of the PC host, port, connection type; in the Web panel we can also decide if Auto Application should start automatically or not at the next reboot of GG863):





PRODUCT NAME Administrat	tion Panel - Windows Interne	et Explorer		
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GG863-	SR			
Menu	[General Information] [Help]	[Contacts]		
Home     GSM     Short Range	PRO3 Web Ad	dministra	tion Panel	
Shell     Actions	Welcome to the PRO3 Web navigate to browse the syste	Administration Pa em.	nel. Choose a menu voice from '	the left sidebar to
Logout				
		All rights reserved	E	
. Set the IP Host parame	ters:		🔽 🖴 Internet	🖲 100% 🔻

- Click on Short Range
   Click on [Server]

Fill the form in the following way:



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<ul> <li>IP Host address: 1</li> <li>Port: 4500</li> <li>Connection Type:</li> </ul>	192.168.121.1 TCP
/ PRODUCT NAME Administratio	n Panel - Windows Internet Explorer 📃 🗖 🔼
🔆 💽 🗸 🙋 http://192.168.121.	3/cgi-bin/zigbee.cgi?index=2&action=5 💉 🗲 🗙 Live Search 🔎 🗸
File Edit View Favorites Tools	Help
🔶 🍄 🌈 PRODUCT NAME Adminis	tration Panel
GG863-S	SR [enver] [Mode] [Connection] Server Configuration Parameters IP: 192.168.121.1 Por: 4500 Connection Type: TCP • Submit
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Click Submit, wait until the Web Panel shows the message:

Parameter configuration was successful

- 2. Click on [Connection]
- Connection: LOCAL



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GG863-				
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<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul> Logout	Connection Connection Connection: LOCAL	onfiguration I	Parameters	
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Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

3. Click on [Mode]

- Automatic: YES



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File Edit View Favorites Tools Help			
😤 🏟 🌈 PRODUCT NAME Administration Pa	inel	🙆 • 🗟 - 🖶 • 🗗	Page 👻 🎯 Tools 👻
GG863-SF	2		
Menu [Server]	[Mode] [Connection]		
Home     GSM     Short Range     Shell     Actions Logout	de Configurat	ion Parameters	
	Telit @ 2008 - All righ	its reserved	

Click Submit, wait until the Web Panel shows the message:

#### Parameter configuration was successful

- 4. Click on GSM:
- Click on [GPRS Settings]

Fill the form with APN:



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#### **GG863-SR Getting Started** 010

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PRODUCT NAME Administratio	on Panel - Windows Internet	Explorer			
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File Edit View Favorites Tools	Help				
🔶 🏟 🌈 PRODUCT NAME Admini:	stration Panel		🙆 • 🔊	🖶 🔹 🔂 Page 🔹 🍏	Tools -
GG863-	SR				^
Menu	[GPRS Settings]				
<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul>	GPRS Configu APN: ibox.tim.it Submit	iration P	arameters	;	
	Telit @ 2008 - A	All rights reserved			

Click Submit, wait until the Web Panel shows the message:

Parameter configuration was successful

- 5. Click on Actions:
  - Click on [Rebooting]Rebooting: YES



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# GG863-SR Getting Started

1vv0300884 Rev.0 - 07/09/2010 PRODUCT NAME Administration Panel - Windows Internet Explorer 🗸 😽 🗙 Live Search 2. ÷ 🟉 http://192.168.121.3/cgi-bin/zigbee.cgi?index=4&action=8 Edit File Favorites Tools Help View ☆ 🖶 🔹 🔂 Page 🔹 🙆 Tools 🔹 ¢, 🛅 - 🔊 PRODUCT NAME Administration Panel **GG863-SR** Menu [Rebooting] Home Rebooting GG863-SR GSM Short Range Shell Rebooting: YES 🗸 Actions Subi YΕ NO Logout Telit @ 2008 - All rights reserved

Click Submit, wait until the Web Panel shows the message:

#### Parameter configuration was successful

- Unplug the USB cable from the PC
- Wait 30 seconds
- plug the USB cable into the local PC



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# II.3. IP Host Demo

IP host will connect to GG863-SR through IP gateway application. In order to establish the local connection (PC+GG863 over USB) the following info are necessary:

• Install SRGatewayDemo.exe: used to communicate with IP Gateway application on GG863 (detailed explanation how to use it can be found in [1] paragraphs 2.5.2 and 7.3). Some of the commands that can be executed on the demo are: start/stop network, node discovery, switch to command/data mode or send any command. It is only example/demo of what client can do from IP host PC.

Control Interface IP 0.0.0.0 Log Folder C:\GatewayLog	
Log Folder C:\GatewayLog	Port 6000
	Browse

After the previous USB plugging run the SRGatewayDemo.exe on the PC:

Choose the folder where to store the logs Click **OK** 

• Clicking Ok, the IP Host waits for GG863-SR IP address and IMEI

🙋 Waiting	Info From Terminal	×
Terminal IP		
Terminal IMEI		
Terminal Port	4500	
	Cancel OK	



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• When appears the following pop-up it means the connection between **GG863-SR** and SRGatewayDemo is established.



#### Click Ok

• Now you can see the information received from GG863-SR:

For example:

2 Waiting I	nfo From Terminal	×
Terminal IP	192.168.121.3	
Terminal IMEI	357251010184982	
Terminal Port	4500	
	Cancel OK	

At this point the PC Demo is communicating with the IP Gateway Application running inside the GG863-SR. Click **OK**.

Detailed explanation how to use it can be found in [1] paragraph 2.5.2



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# CHAPTER III. REMOTE CONNECTION GG863-SR <-> IP HOST

# III.1. Introduction

In this chapter is described how to start the demo application in case of the remote connection between PC and GG863-SR. PC hosting Demo Application will be connect to the GG863-SR through the GPRS connection.



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# **III.2.** Gateway Configuration for Remote Connection

Before starting make sure that Linux USB Ethernet/RNDIS Gadget (necessary to recognize the GG863-SR) is installed (more details can be found in [1] paragraph 2.4.5). It is not require installing it on the IP host PC that will connect remotely with GG863, only on the PC connected locally to the GG863-SR.

Follow the Configuration Gateway phase to set the parameters needed to connect the IP Host to the GG863-SR.

- Turn on the GG863-SR and wait 20 seconds for the system to boot
- Connect the **GG863-SR** to a local PC (see 2.4.5 paragraph)
- In the local PC connected to the GG863-SR type the address:

http://192.168.121.3/cgi-bin/index.cgi

where 192.168.121.3 is one of the IP addresses of the GG863-SR.

Note: IP address 192.168.121.3 (defined in GG863 SW UG) can also be changed (see PRO3 User Guides)

Separation Paration P	el - Windows Internet Explorer	
💽 🗸 🖉 http://192.168.121.3/cgi-t	n/index.cgi 🖌 😽	X Live Search
File Edit View Favorites Tools Help		
🔶 🍄	Panel	🏠 🔹 🔊 👘 👻 🎰 Page 🔹 🎯 Tools 🗸 🎽
		~

You can see the Home Page of the Web Administration Panel (allows to configure parameters of the server-IP host that will be used by Auto Application to establish the connection such as IP address of the PC host, port, connection type; in the Web panel we can also decide if Auto Application should start automatically or not at the next reboot of GG863):



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# GG863-SR Getting Started

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#### 1. Set the IP Host parameters:

- Click on Short Range
- Click on [Server]

Fill the form in the following way:

- IP Host address: Remote Host IP Address (IP address must be public :fixed or dynamic)
- Port: **4500**
- Connection Type: TCP



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#### **GG863-SR Getting Started** 010

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GG863- Menu • Home • GSM • Short Range • Shell • Actions Logout	SR Server [Mode] [Conner Server Con IP: 2172 Port: 4500 Connection Type: TCF Subr	nfiguration	Parameters	
	Telit @ 2	2008 - All ríghts reser	ved	
				>

Click **Submit**, wait until the Web Panel shows the message:

- Parameter configuration was successful
- Click on [Connection] 2.
- Connection: **REMOTE**



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#### **GG863-SR Getting Started** 9/2010

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PRODUCT NAME Administratio	on Panel - Windows Internet Explorer
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File Edit View Favorites Tools	Help
PRODUCT NAME Admini	stration Panel
GG863-	SR
Menu	[Server] [Mode] [Connection]
<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul>	Connection Configuration Parameters
	Telit @ 2008 - All rights reserved

Click Submit, wait until the Web Panel shows the message:

#### Parameter configuration was successful

- 3. Click on [Mode]
- AUTOMATIC: YES (allows to set if Auto Application will be started automatically at next reboot of • GG863-SR)



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GG863	S-SR	
Menu	[Server] [Mode] [Connection]	
<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul>	Mode Configuration Parameters	;
	Telit @ 2008 - All rights reserved	
Click Submit	wait until the Web Panel shows the message:	

Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

- 4. Click on GSM:
- Click on [GPRS Settings]

In order to connect the **GG863-SR** to the GPRS Network, you have to specify the APN, the Access Point Name provided by the Mobile Network Operator



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File Edit View Favorites Tools	Help	
🔶 🍄 🌈 PRODUCT NAME Administ	ration Panel	»
GG863-8	SR	~
Menu .	[GPRS Settings]	
<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul>	GPRS Configuration Parameters	
Click <b>Submit</b> , wait	Telit @ 2008 - All rights reserved until the Web Panel shows the message:	~

Parameter configuration was successful

- 5. Click on Actions:
- Click on [Rebooting] Rebooting: **YES (a**llows to reboot the GG863-SR )





#### **GG863-SR Getting Started** /09/2010

C PRODUCT NAME Administra	tion Panel - Windows Internet Explorer
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File Edit View Favorites To	ols Help
🔶 🏟 🏉 PRODUCT NAME Ada	ninistration Panel
GG863-	-SR
Menu	[Rebooting]
<ul> <li>Home</li> <li>GSM</li> <li>Short Range</li> <li>Shell</li> <li>Actions</li> </ul>	Rebooting GG863-SR
	Telit @ 2008 - All rights reserved
Click Submit wait until th	e Web Panel shows the message:

iomit, wait until the Web Panel snows

#### Parameter configuration was successful

- Unplug the USB cable from the local PC
- Wait 30 seconds



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### III.3. IP Host Demo

IP host will connect to GG863-SR through IP gateway application. In order to establish the remote connection (PC+GG863 over GPRS) the following steps are necessary:

- Install SRGatewayDemo.exe: used to communicate with IP Gateway application on GG863 (detailed explanation how to use it can be found in [1] paragraph 7.3). Some of the commands that can be executed on the demo are: start/stop network, node discovery, switch to command/data mode or send any command. It is only example/demo of what client can do from IP host PC.
- Connect IP host through a modem (es. GT863) that permits to establish the GPRS connection (with command ipconfig we can discover the IP address that needs to be insert in Web panel during configuration)
- Get IP address of the PC host
- IP address of GG863 (during remote connection (between IP gateway application and SRgateway demo) GG863 will communicate its IP address to PC IP Host)

Note: IP address, for both IP host and GG863, must me **public** (fixed or dynamic). In case of dynamic IP address once the connection is established the IP address will not change; only after reboot or shut down it usually changes.

To set up and use the Telit Demo Gateway on the remote IP Host follow these steps:

- 1) Setup of the IP Host and get public IP address:
  - Connect the modem (e.g. Telit GT863-PY) to the IP Host and start the GPRS connection
  - Get the public IP address, using for example the ipconfig command:

IP address.....nnn.nnn.nnn

🗠 Command Prompt	- 🗆 🗙
C:\>ipconfig	<u> </u>

2) Follow the set up phase described in the previous chapter and be sure that:



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ShortRange  $\rightarrow$  [Server]:

- ♦ IP  $\rightarrow$  IP Host address got in step 1
- ♦ Port → 4500
- ♦ Connection Type → TCP

Connection:

- ♦ Connection → REMOTE
- 3) Starting SRGatewayDemo.exe appears the following window:

Configuration	×
Control Interface IP	Port 6000
Log Folder C:\GatewayLog	Browse
ОК	

Choose the folder where to store the logs

• Clicking Ok, the IP Host waits for GG863-SR IP address and IMEI

🙋 Waiting I	Info From Terminal	×
Terminal IP		
Terminal IMEI		
Terminal Port	4500	
	Cancel	

 When appears the following pop-up it means the GPRS connection between GG863-SR and IP Host is established.







#### Click Ok

• Now you can see the information received from GG863-SR:

#### For example:

🙋 Waiting I	Info From Terminal	×
Terminal IP	217.201.172.144	
Terminal IMEI	357251010004966	
Terminal Port	4500	
	Cancel OK	

- Click OK
- At this point the SRGatewayDemo.exe allows to use Gateway functionalities running inside the GG863-SR:
   Detailed explanation how to use it can be found in 7.3 paragraph.



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