TATA Photon Wi-Fi SER8189 Portable Router User Guide

Table of Contents

Part 1: Using the TATA Photon Wi-Fi SER8189	2
Introduction	
Charging the TATA Photon Wi-Fi SER81892	
Opening the Browser Interface (WIN / MAC)	3
Device Activation (WIN / MAC)	,
Opening the Browser Interface & Device Activation for Linux	
The Browser Interface and Settings 17	7
Home	7
My Account	7
CDMA	3
Status	3
Internet Profile)
Configuration)
Diagnostics)
Network)
Router Address)
Network Address Server)
WiFi)
Status	L
Basic	L
Multi SSID	L
Secure Profile	2
Trusted MAC Filter	2
Advanced	3
Firewall (Port Filtering / VPN Passthrough)	3
Traffic Control (Port Forwarding / DMZ)	1
Management (Account / Backup & Restore / Power Management / Factory Default / Activation /	/
Manual Activation)	,
Firmware Upgrade	7
Help	
Part 2: FAQ	
Part 3: Glossary	

Part 1



Using the TATA Photon Wi-Fi SER8189

Introduction

Thank you for purchasing the TATA Photon Wi-Fi SER8189 portable router. This device doesn't need wires, cables, or software to configure it through your Web browser.



This guide describes the browser Interface that allows you to configure the TATA Photon Wi-Fi SER8189. For information about setting up your device, device maintenance and care, etc., consult the printed Quick Start Guide that comes with this device.

We recommend that you read this manual before you start using the TATA Photon Wi-Fi SER8189.

Charging the TATA Photon Wi-Fi SER8189 Device

Note.

The battery should be fully charged before using the TATA Photon Wi-Fi SER8189 for the first time. We recommend an initial charge time of approximately 2 hours. When fully charged, a solid green light will appear next to 'Power' display on the device.



A red or orange light indicates you need to re-charge. Included in your TATA Photon Wi-Fi SER8189 package is an AC-Adapter.

Page 2 / 32 TATA Photon Wi-Fi SER8189_UG

Opening the Browser Interface

How to Connect to the TATA Photon Wi-Fi SER8189 (Windows Users / MAC Users)

1. Turn on the TATA Photon Wi-Fi SER8189 and ensure your WiFi is enabled on your PC or laptop. You can view your available wireless networks by going through the following path **Control Panel -> Network and Sharing Center -> Connect to a network** OR system tray (lower right hand corner of your screen).

Note.

For MAC users: You can view your available wireless networks by going through the following path Airport ->

Open Network Preferences -> Advanced -> Airport

For Linux users: Follow the page from 11 to 16 of this User Guide.

2. Select "TATA Photon Wi-Fi SER8189 XXXX" as your wireless network.

Note.

The last 4 digits, 'XXXX' of the SSID are the last four digits of your MAC (Media Access Control) address. You can find the MAC address of your TATA Photon Wi-Fi SER8189 on the label under the battery.



3. Click Connect.

🌀 🔹 Conne	et to a network		- 8 💌
Select a	network to connec	ct to	
Shov	Wireless	•	49
	TATA Photon Wi-Fi SE	Security-enabled network	k Juli Alexandre Mirei SEPS189.0080
2	myLGNet	Security-enabled network	Signal Strength: Excellent Security Type: WEP Radio Type: 802.11g SSID: TATA Photon Wi-Fi SER8189 0080
- S	Unnamed Network	Unsecured network	llee
			-
<u>Set up a co</u> Open Netw	onnection or network vork and Sharing Center		
			Connect Cancel

The default security for the TATA Photon Wi-Fi SER8189 is WEP 64-bit. The default security key is "12345." Enter 12345 to continue connecting to the TATA Photon Wi-Fi SER8189.

Note.

If you would like to change this security setting after you have activated your device, see the WiFi > Secure Profile

Page 3 / 32 TATA Photon Wi-Fi SER8189_UG

of this document for c	hanging security settin	ngs.	
🔮 Connect to a Netw	ork		×
Type the networ	k security key		
Security key:	Hide characters		
		ОК	Cancel
🕞 🔹 Connect to a network			
Connecting to TATA	Photon Wi-Fi SER8189 0080)	
4			
-		_	
			Cancel

4. When connected to the TATA Photon Wi-Fi SER8189 you will see the connection as 'TATA Photon Wi-Fi SER8189

🔾 🗸 😨 🕨 Control Panel 🔸 Network and Sharing Center ✓ ⁴→ Search Q ? Tasks Network and Sharing Center View full map <u>.</u> -× SWLEE64 (This computer) TATA Photon Wi-Fi SER8189 00... Interne TATA Photon Wi-Fi SER8189 0080 (Public network) Customize Acces Connection Wireless Network Connection (TATA Photon Wi-Fi SER8189 0080) View status III Signal strength: Very good Disconnect 3 Sharing and Discovery Network discovery o On \bigcirc File sharing On • Public folder sharing ● Off \bigcirc Printer sharing Off (no printers installed) • Password protected sharing On \checkmark Media sharing ● Off \checkmark See also Internet Options Show me all the files and folders I am sharing Show me all the shared network folders on this computer

XXXX' – as shown below.

5. Before proceeding, ensure your wireless connection properties are set to 'Obtain an IP Address Automatically.'

Page 4 / 32 TATA Photon Wi-Fi SER8189_UG

The screenshots for the steps are shown below.

For Windows XP and Vista 32-bit users, you can right-click on your wireless network, select properties, then TCP/IP properties. For Windows Vista 64-bit and Windows 7 users, you can click on 'View Status' as shown below.

Control Panel + Network and Sharing Center	✓ 4y Search P
Tasks Notwork and Sharing Contor	0
View computers and devices	
Connect to a network aff Wireless Network Connection Status	View full map
Manage wireless networks General	— 🛌 🎱
Set up a connection or network Connection	Internet
Diagnose and repair IPv6 Connectivity: Limited	
Media State: Enabled	Customize
A Duration: 00:40:12	
C Speed: 54.0 Mbps	oton Wi-Fi SERo199 View status
Details	Disconnect
Activity	
Sent — Kill Received	
N Bytes: 20,207 20,881	
Pi anna anna anna anna anna anna anna an	
Properties Pipsable Diagnose	
P.	· · · · · · · · · · · · · · · · ·
M	e S
See also	
Internet Options Windows Firewall	
Wireless Network Connection Properties	Internet Protocol Version 4 (TCP/IPv4) Properties
Networking Sharing	deneral Alternate Configuration
Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator
Broadcom 802.11b/g WLAN	for the appropriate IP settings.
Configure	Obtain an IP address automatically
This connection uses the following items:	Use the following IP address:
✓	IP address:
QoS Packet Scheduler	Subnet mask:
✓ ■ File and Printer Sharing for Microsoft Networks	Default gateway:
✓ Internet Protocol Version 4 (TCP/IPv4)	
A Link-Layer Topology Discovery Mapper I/O Driver	Obtain DNS server address automatically
E Link-Layer Topology Discovery Responder	Use the following DNS server addresses:
Install Uninstall Properties	Preferred DNS server:
Transmission Control Protocol/Internet Protocol. The default	Alternate DNS server:
wide area network protocol that provides communication across diverse interconnected networks.	
	Advanced
OK Cancel	OK Cancel

Note.

For MAC users: Ensure your wireless connection set as 'Using DHCP" as shown below.

6. Next, open your web browser to <u>http://192.168.5.1</u>. This will bring you to the web user interface of the TATA Photon Wi-Fi SER8189.

Cancel OK

2

M	obile WI-FI Service						
			_	Login	J		
			1/5 丫	Disconnected			
		CDMA Mo	bile Hotspot				
	Internet Connectio	ins in the second se					
	Internet status	Disconnected					
	Received	N/A					
	Transmitted	N/A					
	Connected Time	N/A					
	IP Address	N/A					
	Netmask	N/A					
	Local Network Stat	us					
	IP Address	192.168.5.1					
	Netmask	255.255.255.0					
	URL Address	http://CDMA_AP.h	notspot				
our dev	vice has not bee u activate, you n	indows) n activated at t eed 14 digit PI	time of purchase, N code received f	you must activa rom the Service	te now. Provider.		
our dev ore you	vice has not bee u activate, you n	n activated at t eed 14 digit Pl	time of purchase, N code received f	you must activa rom the Service	te now. Provider.		
our dev ore you k <i>Logir</i>	vice has not bee u activate, you n button on the f	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.		
our dev ore you k <i>Logir</i>	vice has not bee u activate, you n button on the f	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.		
our dev ore you k Logir	vice has not bee u activate, you n button on the f	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.	Login	
our dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f button wi-Fi	n activated at t eed 14 digit Pl top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.	Login	
our dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.	Login	
bur dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f wi-Fi Service	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.	Login	
bur dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f button on the f Wi-Fi Service	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce.	te now. Provider.	Login	word
bur dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f button wi-Fi Wi-Fi Service	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa	you must activa rom the Service ce. rompted to ent	te now. Provider. er your userna	Login ame and pass	word.
our dev ore you k <i>Logir</i> Mobile	vice has not bee u activate, you n button on the f button wi-Fi Wi-Fi Service	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa You will be p The default t	you must activa rom the Service ce. rompted to ent Jsername and F	te now. Provider. er your userna Password is ad	Login ame and pass min/admin.	word.
nect to 1	vice has not bee u activate, you n b button on the f button on the f wi-Fi Service	indows) n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa You will be p The default t	you must activa rom the Service ce. rompted to ent Jsername and F	te now. Provider. er your userna Password is ad	Login ame and pass min/admin.	word.
our devo ore you k Logir Mobile	vice has not bee u activate, you n button on the f button on the f Wi-Fi Service 92.168.5.1	n activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa You will be p The default t	you must activa rom the Service ce. rompted to ent Jsername and F	te now. Provider. er your userna 'assword is ad	Login ame and pass min/admin.	word.
our devo ore you k Logir Mobile	vice has not bee vice has not bee u activate, you n button on the f button wi-Fi Wi-Fi Service 92.168.5.1 92.168.5.1 at WebServe description in the feature	indows) In activated at t eed 14 digit PII top right of the	time of purchase, N code received f e web user interfa You will be p The default t Click <i>OK</i> . The	you must activa rom the Service ce. rompted to ent Jsername and F	te now. Provider. er your userna Password is ad	Login ame and pass min/admin. reen requiring	word. g Activatic
our devo ore you k Logir Mobile	vice has not bee u activate, you n b button on the f button on the f wi-Fi Service 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1	indows) n activated at t eed 14 digit Pli top right of the cop right of the requires a username t your username and er (basic authentication	time of purchase, N code received f e web user interfa You will be p The default t Click <i>OK</i> . The	you must activa rom the Service ce. rompted to ent Jsername and F	te now. Provider. er your userna 'assword is ad	Login ame and pass min/admin. reen requiring	word. g Activatic
bur devore you ore you k Logir Mobile	vice has not bee u activate, you n b button on the f button on the f wi-Fi Service 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1	indows) In activated at t eed 14 digit PII top right of the top right of the requires a username t your username and er (basic authentication)	time of purchase, N code received f e web user interfa You will be p The default to Click <i>OK</i> . The	you must activa rom the Service ce. rompted to ent Jsername and F en, you will see t	te now. Provider. er your userna Password is ad	Login ame and pass min/admin. reen requiring	word. g Activatic
A contraction of the server 11 department of the server 12	vice has not bee u activate, you n b button on the f button on the f wi-Fi Service 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1	indows) In activated at t eed 14 digit PII top right of the top right of the requires a username t your username and er (basic authentication	time of purchase, N code received f e web user interfa You will be p The default t Click <i>OK</i> . The	you must activa rom the Service ce. rompted to ent Jsername and F en, you will see t	te now. Provider. er your userna Password is ad the pop up scr	Login ame and pass min/admin. reen requiring	word. g Activatio
bur devore you ore you devore you devore you devore you was a server ser	Activation (WA vice has not bee u activate, you n button on the f button wi-Fi Wi-Fi Service 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1 92.168.5.1	indows) In activated at t eed 14 digit PII top right of the requires a username t your username and er (basic authentication	time of purchase, N code received f e web user interfa You will be p The default t Click <i>OK</i> . The <i>Note.</i>	you must activa rom the Service ce. rompted to ent Jsername and F en, you will see f	te now. Provider. er your userna 'assword is ad	ame and pass min/admin. reen requiring	word. g Activatio
nect to 1 server 1 f password rname: sword:	Activation (WA vice has not bee u activate, you n a button on the f button on the f button wi-Fi 92.168.5.1 92.168.5.1 92.168.5.1 at WebServed a server is requesting the sent in an insecure mannature connection). Image: Content of the server is requesting the sent in an insecure mannature connection (Content of the sent in an insecure mannature connection). Image: Remember mannature connection (Content of the sent in an insecure mannature connection).	indows) In activated at t eed 14 digit PII top right of the P P r requires a username and r vour username and er (basic authentication y password	time of purchase, N code received f e web user interfa You will be p The default t Click <i>OK</i> . The Note. See Advanc	you must activa rom the Service ce. Frompted to ent Jsername and F en, you will see f ed > Manager	te now. Provider. er your userna 'assword is ad the pop up sci nent > Acco	Login ame and pass min/admin. reen requiring	word. g Activatio document

Page 7 / 32 TATA Photon Wi-Fi SER8189_UG

> Choose Prepaid OR Postpaid option and input the 14 digits PIN code and click Activate button.

Activation	
Account Type	PrePaid PostPaid
Enter Pin	12345678901234

Activate



Note.

During the activation, please do not switch off your device or close the web user interface.

If the Pin code is incorrect, you will be prompted as shown in the window below (Activation Failed).

Please contact your service provider.



Device Activation (Mac Users Only)

1. Go to Airport Icon at the right upper corner of desktop tap menu and click to open.

<u></u>	Fri 4:39 PM Q	K ()	* 🛜
		AirPort: On Turn AirPort Off	
	Airport off	✓ epivalley_5	
Ensure your Airport mode	is turned on to allow your computer to	BLGA-DYN1	
Ensure your raport mode	is turned on to allow your computer to	BLGA-FIX1	
search for available WiFi ne	etworks.	GU LTD.	
		iptime	
		RTAP	
		SDS_AP	0
		TATA Photon Wi-Fi SER8189	0080 🔒
Choose "Open Networl	Preferences" on the drop-down menu	TATA Photon Wi-Fi SER8189	0166 🖬
and select "TATA Photon	Wi-Fi SER8189 XXXX" of your Wi-Fi	TrueWL	
notwork and apply it		Join Other Network	
		Create Network	
		Open Network Preferences	

Page 8 / 32 TATA Photon Wi-Fi SER8189_UG

Here Show All	Network	Q
Locat	ion: Sasatel Profile	•
 AirPort Connected EpiVallModem & EpiVallag_Port & EpiVallag_Port & Bluetooth Not Connected Bluetooth Not Connected & 	Status: Co Air SEF 19 Network Name: T.	Turn AirPort Off Port is connected to TATA Photon Wi-Fi R8189 0080 and has the IP address 2.168.5.100. ATA Photon Wi-Fi SER8189 0080 Ask to join new networks Known networks will be joined automatically. If no known networks will be joined automatically. If no known networks will be joined automatically. Be asked before joining a new network.
+ - 0-	🗹 Show AirPort status ir	n menu bar (Advanced) ?
Click the lock to prevent fu	rther changes.	Assist me Revert Apply

Open your web browser to <u>http://192.168.5.1</u>. This will bring you to the web user interface of the TATA Photon Wi-Fi SER8189.

Click *Login* button. You will be prompted to enter your username and password. The default Username and Password is admin/admin.

Mobile Wi-Fi Service	Tour password win de sent in the clear.	Cogin
	Name: admin	Disconnected 🔟
	Password: •••••	
	Remember this password in my keychain	
Internet Connectio	ns	_
Internet status	Disconnected	
Received	N/A	
Transmitted	N/A	
Connected Time	N/A	
IP Address	N/A	
Netmask	N/A	
Local Network Sta	tus	
IP Address	192.168.5.1	
Netmask	255.255.255.0	

> Choose Prepaid OR Postpaid option and input the 14 digits PIN code and click Activate button.

Page 9 / 32 TATA Photon Wi-Fi SER8189_UG

ccount Type	PrePaid
iter Pin	12345678901234



Note.

During the activation, please do not switch off your device or close the web user interface.

Activation is in Progress. This may take several minutes. Kindly do not switch off your device or close this window.

If the Pin code is incorrect, you will be prompted below window (Activation Failed).

Please contact your service provider.



Opening the Browser Interface and Device Activation for LINUX

Below are the Wi-Fi detection guide for 3 different versions of Linux OS - 'Fedora12', 'Ubuntu10.04' and 'CentOS5.5'

Fedora12

Go to icon at the right upper corner of desktop menu and click to open.
 Wed Jun 30, 12:20 AM



2. Select "TATA Photon Wi-Fi SER8189 XXXX" of your Wi-Fi network and apply it. (If this SSID does not appear, then click 'More networks'.)

3. The default security for the TATA Photon Wi-Fi SER8189 is WEP 64-bit. The default security key is "12345". Enter the key to continue connecting to the TATA Photon Wi-Fi SER8189.

٩	Wireless Netwo	ork AuthenticationRequired 💦 🙁
O	Authenticatio	n required by wireless network
	Passwords or encry wireless network '1	ption keys are required to access the ATA Photon Wi-Fi SER8189 0080'.
	<u>W</u> ireless security:	WEP 40/128-bit Key
	<u>K</u> ey:	•••••
		□ Sho <u>w</u> key
		<u>c</u> ancel <u>Connect</u>

Note.

Please ensure your wireless connection set as "Automatically obtain IP address settings with DHCP" by going through System -> Administration -> Network -> (Network Configuration Window, choose 'Devices' tab, double click Wireless) -> (Wireless Device Configuration Window, choose DHCP, Click OK)

Preferences >			🛃 Network Configuration 🗼 🗕 🗆 🗙
Administration 🔰	😽 Add/Remove Software		<u>File Profile Help</u>
Help	Authentication		New Edit Conv Delete Activate Deactivate
About this Computer	🛃 Bootloader		
	👩 Date & Time		Devices Hardware DNS Hosts
Lock Screen	🥦 Firewall		physical hardware here. Multiple logical devices can be
Log Out epicom	📁 Language		associated with a single piece of hardware.
Shut Down	- Logical Volume Management		Profile Status Device Nickname Type
	🛃 Networ	•	Active state et al. Wireless
	Network Device Control		
	Printing		
	🔁 SELinux Management		
	 Services 		
	😁 🊰 Software Update		
	🙆 Users and Groups		Active profile: Common

The screenshots for the steps are shown below.

Page 11 / 32 TATA Photon Wi-Fi SER8189_UG

General	Route	Hardwara davier	Wireloss E-thi-	arc			
General	Route	Hardware device	Wireless Settin	ngs			
<u>N</u> icknam	e: eth1						
Contr	olled by	<u>N</u> etworkManage	r				
□ <u>A</u> ctiv	ate devi	ce when compute	r starts				
Allow	all <u>u</u> ser	s to enable and d	isable the device	2			
Enabl	le IPv <u>6</u> o	onfiguration for th	nis interface				
 Autor 	matically	obtain <u>I</u> P addres	s settings with:	dhcp 🗘		>	
DHCP	Settings						
Hostn	ame (op	tional):					
🗹 Au	tomatica	ally obtain <u>D</u> NS in	formation from p	provider			
Au	tomatic	ally obtain <u>D</u> NS in	formation from p	provider			
O Statio	tomatica call <u>y</u> set	ally obtain <u>D</u> NS in IP addresses: ress Settings	formation from p	orovider N			
O Static ∩ Manua Addre	tomatica call <u>y</u> set al IP Add ss:	ally obtain <u>D</u> NS in IP addresses: ress Settings	formation from p	provider			
O Statio	tomatica call <u>y</u> set al IP Add ss: t mask:	ally obtain <u>D</u> NS in IP addresses: ress Settings	formation from p	provider	 		
C Static Manua Addre Subne	tomatica call <u>y</u> set al IP Add ss: et mask:	IP addresses:	formation from p	provider			
✓ Au O Static Manua Addre Subne Defau	tomatica call <u>y</u> set al IP Add ss: et mask: It ga <u>t</u> ew	IP addresses: ress Settings ay address:	formation from p	orovider			
✓ Au O Static Manua Addre Subne Defau Primary	tomatica cally set al IP Add ss: et mask: lt gatew DNS:	IP addresses: ress Settings	formation from p	provider			
Au Static Manua Addre Subne Defau Primary Seconda	tomatica call <u>y</u> set al IP Add ss: et mask: lt ga <u>t</u> ew DNS: ry DNS:	ally obtain DNS in IP addresses: ress Settings	formation from p	brovider			
Au Addre Subne Defau Primary Seconda Set M	tomatica cally set al IP Add ss: t mask: t gatew DNS: ry DNS: ITU to:	ally obtain DNS in IP addresses: ress Settings ay address:	formation from p	provider			

Ubuntu10.04

1. Go to icon

at the right upper corner of desktop menu and click to open.

🛐 🤹 🛊 🗕 🖂 Wed Jun 30, 11:57 AM

	disconnected	
	CEV	() ?
	FLTXMS	() ?
	hoshin	() ?
	intelra	হি
	TATA Photon Wi-Fi SER8189 0080	(in <u>a</u>
/	More networks	
	VPN Connections	
	Connect to Hidden Wireless Network	
	Create New Wireless Network	

2. Select "TATA Photon Wi-Fi SER8189 XXXX" of your Wi-Fi network and apply it. (If this SSID does not appear, then click 'More networks'.)

3. The default security for the TATA Photon Wi-Fi SER8189 is WEP 64-bit. The default security key is "12345". Enter the key to continue connecting to the TATA Photon Wi-Fi SER8189.

8 😒	Wireless Network	Authentication Required
Ø	Authenticatio	n required by wireless network
<u>8</u> /8)	Passwords or encry wireless network 'T	ption keys are required to access the ATA Photon Wi-Fi SER8189 0080'.
	Wireless security:	WEP 40/128-bit Key
	Key:	•••••
		Show key
		Cancel Connect

Note.

Please ensure your wireless connection set as "Automatic (DHCP)" by going through System -> Administration -> Network Tools -> (Network Connections Window, choose 'Wireless' tab, click Edit) -> (Editing Auto TATA Photon Wi-Fi SER8189 Window, choose IPv4 Settings tab, choose Automatic (DHCP), Click Apply) The screenshots for the steps are shown below.

Page 12 / 32 TATA Photon Wi-Fi SER8189_UG



CentOS5.5

1. Go to Applications -> Accessories -> Terminal. Command 'iwlist eth1 scan'

Note. 'Wireless Tool Package' should be installed in your computer to use the above command.

3	root@localhost:~
Ele Edit View Terminal Tabs Help	
[root@localhost -]# iwlist eth1 scan	

Page 13 / 32	TATA	Photon	Wi-Fi	SER8189_	UG
--------------	------	--------	-------	----------	----



Page 14 / 32 TATA Photon Wi-Fi SER8189_UG

Automatically obtain DNS information from provider

DHCP Settings Hostname (optional):

Statically set IP addresses:

(Choose 'Wireless settings' tab, input the SSID (TATA Photon Wi-Fi SER8189 xxxx)

The default security for the TATA Photon Wi-Fi SER8189 is WEP 64-bit. The default security key is "12345"

2	Wireless Device Configuration	×
<u>General</u> <u>R</u> oute <u>H</u> ard	dware device Wireless Settings	
<u>M</u> ode:	Auto	=
Network name (SSID):	
O <u>A</u> uto	Specified: TATA Photon Wi-Fi SER8189 0080	
<u>C</u> hannel:	Auto	▼
<u>T</u> ransmit rate:	Auto	•
A <u>u</u> thentication	Open system (open)	•
Key (use 0x for her)	12345	

3. (Network Configuration Window, choose 'Devices' tab, select wireless profile, click 'Activate' button and 'Yes' and 'OK'

Network Configuration	_ C X		Network Configura	tion	
Ble Brofile Help	Ble	Profile Help			
New Edit Copy Delete Activate Deactivate		ew Edit o	Copy Delete	ate Deactivate	
Vou may configure trace bits Hasa Vou may configure network devices associated with physical hardware here. Multiple logical devices can be associated with a single piece of hardware.	B	You may of physical h associated	configure network device ardware here. Multiple i d with a single piece of i	es associated with logical devices can be hardware.	
Profile Status Device Nickname Type	Pro	file Status	Device Nickname	Туре	
✓ S Inactive S ⁰ eth1 eth1 Wireless		🔊 Active	s ⁰ eth1 eth1	Wireless	
Active 🗃 eth0 eth0 Ethernet		🕸 Active	📻 eth0 eth0	Ethernet	
	×	3 8			
System-config-network: You have made some changes in your conf To activate the network device eth1, the ch- saved. Do you want to continue?	figuration. anges have to be	9	system-config-netwo Changes are saved. network services or i	ork: You may want to resta restart the computer.	It the network and
Active profi	Activ	e profile: Comn	non		

Your PC/Laptop has detected TATA Photon Wi-Fi SER8189. Follow the common procedure below.

4. Open your web browser and enter http://192.168.5.1 into the address window.

🔶 👻 🔂 🙆 🖀 🔘 http://192.168.5.1/defa	ilt.asp		ු 🖌 🛃 🖌 Google
ost Visited 🗸 🕡 Release Notes 💼 Fedora Project 🗸 🍵	Red Hat 🛩 💼 Free Content 🗸		
DMA Portable Wifi Router 🛛 🕂			
Aozilla Firefox is free and open source software from the	e non-profit Mozilla Foundation.		Know your rights.
	Tahataam	-	
	Mobile Ni-FI Service	Login	
		215 T Disconnected 🚥	
		CDMA Mobile Hotspot	
	Internet Connection	•	
	Internet status	Disconnected	*
	Received	Nin	
	Connected Time	Nik	
	IP Address	NA	
	Netmask	NiA	
	Local Network Statu	5	
	IP Address	192.168.5.1	
	Notmask	255.255.255.0	
	URL Address	http://CDMA_AP.hotspot	
	WiFi Status		
	Network Name (SSID)	TATA Photon Wi-Fi SER8189 0080	
	Security Profile	WEP-Secure (WEP-64bit)	
	Users	2/5	
	Customer Care: 1800 266 12	1 (toll tree) Digital Convergence Leader EpiCom Co., Ltd. www.epicom.co.kr	

Page 15 / 32 TATA Photon Wi-Fi SER8189_UG

5. Click Login button on the right top of the browser. The default ID and Password is admin/admin.

	7/7 w-m Lagh
	2/5 T Disconnected (III)
8	Authentication Required
Þ	A username and password are being requested by http://192.168.5.1. The site says: "WebServer"
User Name:	admin
Password:	•••••
	Cancel Cancel

6. For Activation, follow page 7 (or page 10) of this User Guide.

Page 16 / 32 TATA Photon Wi-Fi SER8189_UG

The Browser Interface and Settings

1. Open your Web browser and enter <u>http://192.168.5.1</u> into the address window.

The browser interface will open.

me I CDMA I Netwo	ork I WiFi I Advanced I Help (1/5 単 Disc	connected III) Me
	CDMA Number of users/devices	Battery
Internet Connectio	ns	
Internet status	Disconnected	
Received	N/A	
Transmitted	N/A	
Connected Time	N/A	
IP Address	N/A	
Netmask	N/A	
Local Network Stat	us	
IP Address	192.168.5.1	
Netmask	255.255.255.0	
	http://ODMA_AB.hotopot	

Your TATA Photon Wi-Fi SER8189 uses a browser interface to configure the device.

The browser interface lets you:

- View the status of aspects of your network.
- Set up Activation, Internet Profile, WEP or WPA security, MAC filtering, Port Filtering and Port Forwarding
- Set up a hotspot to allow a maximum of five connections to your device without having to share your network name and network key.

Home

The Home screen is the first screen you see after logging in to the browser interface. It is the main point of entry for all your work in the browser interface. The menu bar runs horizontally along the top of the browser interface. It shows how many users or WiFi embedded devices are connected. It also displays information about your device's connection strength and battery level.

• My Account

Click My Account to see your tariff and data usage, it will redirect your service provider's webpage.

Page 17 / 32 TATA Photon Wi-Fi SER8189_UG

Home I CDMA I Network I WiFi I Advanced I Help 1/5 ♥ Disconnected Ⅲ) · My Account	Mobile Wi-Fi Service			
	Home I CDMA I Network I WiFi I Advance	ed I Help 1/5 Ÿ	Disconnected	

CDMA

The CDMA menu allows you to set your authentication, Internet profile, network option and Internet connection information.

Mobile Wi-Fi Service			
Home I CDMA I	Network I WiFi I Advanced	IIHelp 1/5 Ÿ	Disconnected (IIII)
Internet Pr Configura Diagnosti	rofile tions cs		

• Status

Click *Connect* to connect to your network.

The TATA Photon Wi-Fi SER8189 comes pre-configured with the information required to connect to the network. It will not normally require any additional configuration to the basic settings unless you are using the device behind a corporate firewall, and this may require the appropriate proxy server settings to be modified.

It displays the following information:

- Number of bytes received and transmitted
- Duration of the current connection
- The device's IP address and netmask
- Gateway IP address
- DNS server IP address

Internet Connections				
Internet Profile	TATA Photon Plus Postpaid View			
Internet Status	Disconnected Connect			
Connection Status	Disconnected			
Roaming	Home			
Received	N/A			
Transmitted	N/A			
Connected Time	N/A			
IP Address	N/A			
Netmask	N/A			
Gateway	N/A			
DNS	N/A			

Page 18 / 32 TATA Photon Wi-Fi SER8189_UG

• Internet Profile

Internet Profile menu allows you to add / edit / delete your Profile name.

Internet Profiles	
Profile Name	TATA Photon Plus Postpaid 🔻
UserID	internet
Password	internet
Access number	#777
	Add Edit Delete

• Configuration

Auto Connection Enable: The device will be connect to the CDMA network automatically when it is turned on.

Options	
Auto Connection	e Enable Disable
	Арріу

Hybrid: Device will operate in dual mode with Photon+ and Photon Whiz periodically depending on network strength

Photon Whiz: Device will operate only in Photon Whiz mode

TATA Photon Plus : Device will operate only in Photon+ mode

Network settings			
Mode preference	Output Description (Control of the second	TATA Photon Whiz	TATA Photon +
		Apply	

• Diagnostics

This menu gives you the information of the device.

CDMA Connections			
Connection Status	Disconnected		
Service Type			
Roaming	Home		
RSSI	-125dBm		

CDMA Modem

Manufacturer	EpiCom
Model	SER-8189
Firmware Version	SB8189DT01
ESN	0000000
MEID	000000000000
MDN	1234567890
PRL Version	0
Battery Level	100 %

Page 19 / 32 TATA Photon Wi-Fi SER8189_UG

Network

The Network menu allows you to set domain name of the wireless browser interface and DHCP (Dynamic Host Configuration Protocol)

Mobile Wi-Fi Service		
Home I CDMA I	Network WiFi Advanced Help 1/5 T	Disconnected (IIII)
	Network Address Server	

Router Address

The wireless browser interface's default URL address is http://CDMA_AP.hotspot. The address can be used instead of IP address (192.168.5.1) at your convenience. The URL address also can be changed.

Local Network Setup			
IP Address	192.168.5.1		
Netmask	255.255.255.0		
MAC Address	00:07:79:07:00:01		
URL Address	http://CDMA_AP .hotspot		

Apply

• Network Address Server

This menu allows you to modify WiFi DHCP IP range.

Local Network Setup		
DHCP Server	Enable 🔻	
DHCP IP Range	192. 168. 5. 100 ~ 110	

Apply

Note.

DHCP Server: Enabling DHCP server allows the device to automatically assign a local IP address to a new device joining your network (such as wireless printer or an additional laptop). When DHCP server is disabled, you will have to assign static IP address to all devices on your network.

Wi-Fi

The WiFi menu allows you to view status information for your WiFi network and configure your hotspot.

Mabile Wi-FI Service			
Home I CDMA I Network	WiFi I Advanced I	Help 1/5 平	Disconnected (III)
	Status		
	Basic		
	Multi SSID		
	Secure Profile		
Net	Trusted MAC Filtering	erver (DHCP)	

• Status

This Status menu gives you following status information:

- Network Name (also known as SSID)
- Security method in use
- Users (clients) information currently connected to the device

TATA Photon Wi-Fi SER8189 0080	
WEP-Secure (WEP-64bit)	
	TATA Photon Wi-Fi SER8189 0080 WEP-Secure (WEP-64bit)

Hostname	MAC Address	IP Address	Connection Typ
swlee64	00:15:AF:8A:AC:F1	192.168.5.100	DHCP

Basic

This menu allows you to modify WiFi and Secure Profile.

Basic Setup	
Network Mode	802.11b/g mixed mode 🔻
Network Name(SSID)	TATA Photon Wi-Fi SER 🔲 Don't broadcast SSID
Frequency (Chappel)	Auto O Manual
Frequency (Channel)	2412MHz (Channel 1) 📼
Secure Profile	WEP-Secure (WEP-64bit) View

Apply

Network Mode: You can choose a type of wireless networking.

Network Name (SSID): You can rename SSID. Default SSID is TATA Photon Wi-Fi SER8189 xxxx.

Frequency: It is recommended to set in Auto always.

Secure Profile: It shows a type of security that is being used in the device. You may modify Secure Profile by clicking *View* button.

Multi SSID

You can use Multi SSID with another secure profile. Enable Mode logically allows your device to be divided into two. When you want to share network with a certain user in a limited way, Multi SSID can be useful

Multi SSID Setup	
Mode	Enable Isable
Multi SSID	Don't broadcast SSID
Secure Profile	OPEN SYSTEM (NONE) View

• Secure Profile

This menu allows you to modify Secure Profile.

Profile Name	OPEN_SYSTEM (NONE)
Security Method	NONE

Click Add, define Secure Profile. You can set Profile Name, Security Method, Encryption and Passphrase.

Secure Profiles	
Profile Name	
Security Method	WPA-PSK -
Encryption	● TKIP ◎ AES ◎ TKIP/AES
Passphrase	* 8 ~ 63 ASCII Characters
	Apply Cancel

- WPA-PSK/WPA2-PSK: New WiFi certification program mode
- WEP(68bit or 128bit): Traditional WiFi certification program mode
- TKIP/AES: Data encryption mode
- 1. Type secure profile name in the Profile Name box.
- 2. Select a security protocol from the Security Method. (The Encryption box displays the corresponding encryption level.)
- 3. Enter a new network key in the Passphrase box (Permissible characters are listed in gray just under the box.)
- 4. Click Apply.

Note.

When you click Apply, you will need to reconnect to your router by closing your current view and re-opening a browser connection to <u>http://192.168.5.1</u>.

• Trusted MAC Filtering

MAC Filter allows you to limit access to your device to only those devices with a specified MAC address (a unique

Page 22 / 32 TATA Photon Wi-Fi SER8189_UG

code	assigned	to	hardware	such as	s network	adapters).
000.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			00.0			

Trusted MAC Filtering	
Mode	Enable
Trusted Mac List	Add ex) 00:01:02:03:04:05 Delete Delete All

I	Apply	
I	Арріу	

Finding the MAC Address

The MAC Address is also known as a hardware or physical address for a device, usually a network adapter. It consists of six pairs of numbers and letters (for example, 00:21:9B:1C:64:34). You can view the MAC address for any device connected to the TATA Photon Wi-Fi SER8189 device in the WiFi Clients section of the WiFi Status screen. (See "WiFi Clients" on page 15.)

Note.

When you enable this feature for the first time, ensure you add your wireless MAC first, then click Apply.

Advanced

This menu allows you to configure your device to enable Port Filtering, VPN Passthrough, Port Forwarding, DMZ (Demilitarized Zone)Backup Configuration, Power Management, Activation, WiFi Firmware upgrade etc.

Mobile Wi-Fi Service				
Home I CDMA I Network I WiFi	Advanced I Help	1/5 平	Disconnected	
Wifi Trusted	Traffic Control Management Firmware Upgrade	Configuration		
	in to Filtering	oomgaraaon		_

Firewall

1) Port Filtering

Port filtering allows you to conserve bandwidth by preventing non-business applications from accessing the Internet, and to prevent applications such as online games from accessing the Internet.

- Input the application value in the Name, Port and Protocol boxes.

Add Rule			
Name			
Port	~	Select Well-Known Port	•
Protocol	TCP&UDP -		
	Add	Reset	
Rule Lists			
No.	Name	Port	Protocol
	Update	Delete	

2) VPN Passthrough

It is required if you are going to connect to a VPN. (Such as a corporate system)

VPN Pass Through		
L2TP passthrough	Enable	Oisable
IPSEC passthrough	Enable	Oisable
PPTP passthrough	Enable	Oisable

• Traffic Control

1) Port Forwarding

Port Forwarding allows designated users or applications to reach specified servers, such as FTP and DNS servers on your computer. Also, some online games require incoming access to work properly.

Add Rule			
Name			
Port	~	Select Well-Known Po	ort 🔻
Protocol	TCP&UDP -		
Destination IP Address	192. 168. 5.		
	Add R	eset	
Rule Lists			
No. 🔲 Name	Port	Protocol	IP Address
	Update De	elete	

Note.

You cannot use port forwarding with some standard data accounts. To use port forwarding, you may need to request a static IP address from your carrier / service provider..

Page 24 / 32 TATA Photon Wi-Fi SER8189_UG

2) DMZ (Demilitarized Zone)

DMZ function is a host on the internal network that has all ports exposed, except those ports otherwise forwarded. Set mode as Enable and enter the local static IP address.

DMZ Configuration	
Mode	Enable
IP Address	192. 168. 5.

Apply				
	Δ		110	

Management

Note.

When you change the default settings, keep your new information in a safe place.

1) Account

Create or change administrator's name and password.

Account Setup		
Account	admin	
Password		
Confirm Password		

e.m.	124	1 Y I

2) Backup & Restore

Backup menu allows you to save your settings to your PC, memory card, CD etc. And Restore menu allows you to restore previous saved settings.

Backup Configuration	
Export	Backup
Restore Configuration	
File Location	Browse
	Apply

3) Power Management

Enable Ethernet port when you want to connect your computer directly to the device using a LAN (RJ45) cable.

Ethernet Po	rt	
Setting	Enable Oisable	
	Apply	
Page 25 / 32	TATA Photon Wi-Fi SER8189_L	JG

Power Saving		
Radio Off	Never	•
Power Off	Never	•

• Ra	dio Off - You can use the Radio Off mode to customize your device to switch to a low power mode when
	not in use. There are 10 minute increments from 10-60 minutes. Select Never to disable this
	power saving feature. If you want to switch the WiFi Radio on earlier than the time you set in this menu,
	you can push the power button of the device one time lightly. A blue WiFi LED will appear that WiFi
	devices are ready to connect.

- Power Off The Power Off mode allows you to choose when your device will automatically power off, to save battery life, due to inactivity. There are 10 minute increments from 10-60 minutes you can select. Select *Never* to disable this power saving feature.
- 4) Factory Default

Click Update to reset your device to the default factory settings.

5) Activation

Please refer page #6-9 for Activation procedure.

Activation					
Account Type	PrePaid O PostPaid				
Enter Pin	12345678901234				
Activate					
6) Manual Activation					
Please contact your service provider for this menu.					

Manual Activation St	tep 1 of 2
Activation Code	
	Apply
Manual Activation St	tep 2 of 2
MDN	1234567890
MIN	• • • • • • • • • •
	Apply
<i>ge 26 / 32</i> TATA F	Photon Wi-Fi SER8189_UG

Firmware Upgrade

You can upgrade your device's configuration file to your computer.

Version	W_8189_ITS_1.0		
File Location		Browse	

Help

Help menu gives you the information about customer service, User Guide, FAQ and Troubleshooting.

- Customer Service
- User Guide
- FAQ
- Troubleshooting

Part 2	
FAQ	Mobile Wi-Fi Service

Q: What is the TATA Photon Wi-Fi SER8189's main purpose unlike other routers?

A: The TATA Photon Wi-Fi SER8189 is a portable WiFi router that fits in the palm of your hand. It will allow you to connect up to 5 devices to access the Internet, such as laptops, digital cameras, portable game consoles or mobile phones.

Q: What networks does the TATA Photon Wi-Fi SER8189 operate on?

A: The TATA Photon Wi-Fi SER8189 operates on 3G wireless networks.

Q: What are the air holes on the both side of the TATA Photon Wi-Fi SER8189?

A: The air holes are designed to reduce the heat generated by the device itself while it used. Keep the device away from open flames, dusty conditions, and keep it dry for optimal performance.

Q: What kind of security is available with the TATA Photon Wi-Fi SER8189?

A: The TATA Photon Wi-Fi SER8189 supports advanced WiFi security protocol through standard methods such as WiFi Protected Access (WPA & WPA2) and the previous method of Wired Equivalent Privacy (WEP). More advanced settings are available in the Web based user interface.

Q: What if the user forgets their TATA Photon Wi-Fi SER8189 password?

A: The TATA Photon Wi-Fi SER8189 can be reset by powering on the device, remove the battery cover, and depress the small button near the bottom of the battery using a paper clip or pen and hold for 3 seconds. The Power LED will turn off-and-on twice to indicate reset is successful. The unit will power up with the factory default configuration.

Q: What might the owner of the TATA Photon Wi-Fi SER8189 need to be aware of before sharing with multiple devices?

A: With multiple devices or used as a temporary hotspot:

- If there are several heavy data users on at the same time, you may notice a degradation in performance
- Users are not allowed to access more than 5 devices to the TATA Photon Wi-Fi SER8189 in order to keep the devices' data speed stable enough to be communicated without a problem.
- Be aware these users are contributing to your data usage. You may want to check your account online to see how much of a difference it is making and how close you are to any usage caps that may apply under your network connection plan.
- If all are accessing TATA Photon Wi-Fi SER8189 that is using the battery, the battery will drain faster than the average of 3 hours usage time for one user.

Q: Can a user connect the TATA Photon Wi-Fi SER8189 to their computer with a USB cable?

A: When the TATA Photon Wi-Fi SER8189 is tethered via a USB cable to a computer, the device will not function as a hotspot. In this mode the TATA Photon Wi-Fi SER8189 can be charged, or re-charged only.

Q. What is the LAN port of TATA Photon Wi-Fi SER8189 can be used for?

A: The LAN Port of the TATA Photon Wi-Fi SER8189 is for users who have a laptop or desktop which does not have WiFi capability.

Q: What is the average battery usage time?

A: The battery will have on average 3 hours of active use time when connected to a single device and will discharge more rapidly as additional devices are connected (up to 5 WiFi devices are acceptable). There is 9 hours of standby time.

Q: Why the TATA Photon Wi-Fi SER8189 turns off while in used and it wouldn't turn on again?

A: The red solid power LED indicates the battery is below 20% and if it's blinking, it indicates the TATA Photon Wi-Fi SER8189 will turn off very soon. After the battery has run down, it turns off automatically. So you need to charge the battery using AC-DC adaptor.

Please refer to the Quick Start Guide on page 12.

Q: How close does the user's WiFi enabled device need to be from the TATA Photon Wi-Fi SER8189?

Page 28 / 32 TATA Photon Wi-Fi SER8189_UG

A: The device will need to be within 5 meters of the WiFi device to work. So a user can keep the TATA Photon Wi-Fi SER8189 in their pocket, laptop bag, or sitting on a desk or window ledge across a room (for better coverage).

Q: Does the TATA Photon Wi-Fi SER8189 support voice calls, fax and/or text messaging?

A: Voice calls, text messaging and fax are not supported.

Q: Can the TATA Photon Wi-Fi SER8189 be used for memory storage?

A: The TATA Photon Wi-Fi SER8189 does not support onboard or removable memory storage.

Q: How long does a user need to charge the battery before they begin using?

A: The battery must be fully charged before using the TATA Photon Wi-Fi SER8189 for the first time. We recommend a minimum of 3 hours charging time before first use. After the initial use and set-up, you may use with the battery alone or with the battery and the AC power.

Q: Does the TATA Photon Wi-Fi SER8189 require software installation?

A: The TATA Photon Wi-Fi SER8189 comes with a browser URL that allows the user to configure the device. You can activate, select a profile, establish security and set more advanced settings without installing any software.

Q: What does the user of the TATA Photon Wi-Fi SER8189 need to begin to do configuration and activation?A: See "Device Activation" of this manual for activation instructions. (page 7 ~10)

Q: What if the TATA Photon Wi-Fi SER8189 can not access the internet even though the unit has been activated?A: Verify your network & signal strength for optimal performance.

Q: When will a user of the TATA Photon Wi-Fi SER8189 need to access the browser interface?

A: The TATA Photon Wi-Fi SER8189 browser interface will only need to be accessed or used when configuring your device for the first time or changing the security settings or establishing more advanced settings.

Q: Why does the TATA Photon Wi-Fi SER8189 gets warm?

A: The TATA Photon Wi-Fi SER8189 has two radios inside: the 3G CDMA radio and the WiFi radio. In fringe areas of low 3G coverage, the transmit power will be at the max and therefore generate more heat. The device has been environmentally tested and approved by the FCC. Part 3

Glossary



• 802.11 (b, g, n) — A set of WLAN communication standards in the 2.4, 3.6 and 5 GHz frequency bands.

• Access Point (AP) — A device that allows wireless communication devices to connect to a wireless network using a standard such as WLAN.

• **DHCP** — Dynamic Host Configuration Protocol. A network application protocol used to obtain configuration information for an Internet Protocol network.

• **DHCP Server** — A server that uses DHCP to obtain configuration information for operation in an Internet Protocol network.

• **DNS** — Domain Name System. A system for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol.

• ESN — Electronic Serial Number. A unique 32-bit number embedded in a wireless device that identifies the device.

• MEID — Mobile Equipment Identifier. The unique second-generation serial number assigned to the TATA Photon Wi-Fi SER8189 for cellular network use.

- Firmware A program that internally controls an electronic device.
- FTP File Transfer Protocol. A network protocol for exchanging files over a TCP network.
- Gateway A network point that acts as an entrance to another network that uses a different protocol.
- Host Name The unique name by which a network-attached device is known on a network.
- Hotspot A WLAN access point or area for connecting to the Internet.
- **HTTP** Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide Web over the Internet.
- IP address Internet Protocol address. The address of a device attached to an IP network (TCP/IP network).

• LAN — Local Area Network. A type of network that lets a group of computers, all in close proximity (such as inside an office building), communicate with one another.

• MAC Address — A number that uniquely identifies a given network adapter on a LAN. MAC addresses are 12digit hexadecimal numbers.

• MIN — Mobile Identification Number. It refers to the 10-digit unique number that a wireless operator uses to identify the mobile phone. A MIN is a number that uniquely identifies a mobile working under TIA standards for Cellular and PCS technologies

• **MSID** — Mobile Station ID. A number provisioned by a service provider to a mobile phone that identifies that phone to the network.

- MSL Master Subsidy Lock. A numeric code for accessing certain phone settings.
- NAI Network Access Identifier. A standard way of identifying users who request access to a network.
- Network Mask A number that allows IP networks to be subdivided for security and performance.
- NNTP Network News Transfer Protocol. An Internet application protocol for reading and posting Usenet

Page 30 / 32 TATA Photon Wi-Fi SER8189_UG

(newsgroup) articles.

• **POP** — Post Office Protocol. An Internet protocol for retrieving email from a remote server over a TCP/IP connection.

• **Port** — A virtual data connection used by programs to exchange data.

• Port Forwarding — A process that allows remote devices to connect to a specific computer within a private LAN.

• Port Number — A number assigned to a user session and server application in an IP network.

• **Protocol** — A standard that enables connection, communication, and data transfer between computing endpoints.

• **PPTP** — Point-to-point Tunneling Protocol. A method for implementing virtual private networks that does not provide confidentiality or encryption.

• **PRL** — Preferred Roaming List. A list that your wireless phone or device uses to determine which networks to connect with when you are roaming.

• RFB — Remote Frame Buffer. A protocol for remote access to graphical user interfaces.

• Router — A device that connects two networks.

• RTP — Real-time Transport Protocol. A packet format for streaming multimedia over the Internet.

• SMTP — Simple Mail Transfer Protocol. An Internet standard for email transmission across IP networks.

• SSID — Service Set Identifier. The name assigned to a WLAN network.

• TCP — Transmission Control Protocol. A core protocol for transmitting and receiving information over the Internet.

• **TCP/IP** — Transmission Control Protocol/Internet Protocol. A communications protocol developed under contract from the U.S. Department of Defense to internetwork dissimilar systems.

• Telnet — Telecommunication Network. A network protocol used on the Internet or on local area networks.

• TFTP — Trivial File Transfer Protocol. A file transfer protocol with a subset of FTP functionality.

• UDP — User Datagram Protocol. A simple transport protocol used to transfer information on the Internet.

• VNC — Virtual Network Computing. A graphical desktop sharing system that uses the RFB protocol to remotely control another computer.

• VPN — Virtual Private Network. A secure private network that runs over the public Internet.

• VPN Passthrough — A feature that allows a client to establish a tunnel only with a specific VPN server.

• WAN — Wide Area Network. A public network that extends beyond architectural, geographical, or political boundaries (unlike a LAN, which is usually a private network located within a room, building, or other limited area).

• WEP — Wired Equivalent Privacy. An IEEE standard security protocol for 802.11 networks. Superseded by WPA and WPA2.

• WLAN — Wireless Fidelity. Any system that uses the 802.11 standard developed and released in 1997 by the IEEE (Institute of Electrical and Electronics Engineers).

• WLAN Client — A wireless device that connects to the Internet via WLAN.

• WLAN — WLAN LAN. A typically low-power network that transmits a wireless signal over a span of a few hundred feet and usually only to stationary devices.

• WPA/WPA2 - WLAN Protected Access. A security protocol for wireless 802.11 networks from the WLAN

Page 31 / 32 TATA Photon Wi-Fi SER8189_UG

Alliance.

• WWAN — Wireless Wide Area Network. Wireless connectivity to the Internet achieved using cellular tower technology. This service is provided through cellular providers. WWAN connectivity allows a user with a laptop and a WWAN device to surf the Internet, check email, or connect to a virtual private network (VPN) from anywhere within the regional boundaries of the cellular service.