

CPE (SWT225) User Manual



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Section 1. SWT225 Components

SWT225 CPE provides the WiFi service to users using the WiMAX service in the region where the WiMAX service is available. In this manual, [terminal] stands for all devices which can use wireless LAN (WiFi), such as laptops, smart phones, and other devices.

1.1 Components



Figure 1. Components of SWT225

Component	Quantity
Main body	1EA
Bracket (screws included)	1EA
LAN cable	1EA
Adapter	1EA



1.2 Front View



Figure 2. Front LEDs

Items		Descriptions	
Power	ტ	Indicates power supply to the device. Flashes green when normal.	
WiFi	(ŀ	Indicates the state of wireless LAN (WiFi). Flashes green when normal. Blinks while data is transferred.	
LAN1	LAN1	Indicates the state of LAN Port 1.	
LAN2	LAN2	Indicates the state of LAN Port 2.	
WiMAX1	©t®1	Indicates the state of WiMAX Module 1.	
WiMAX2	(°†°)2	Indicates the state of WiMAX Module 2.	



1.3 Rear View



Figure 3. Rear Ports

No.	Items	Descriptions	
		Provides wired connection to a terminal. A terminal	
1	LAN1	connected into this port will be allocated an IP address	
		automatically (via DHCP).	
		Provides wired connection to a terminal. A terminal	
2	LAN2	connected into this port will be allocated an IP address	
		automatically (via DHCP).	
		Used to reset the device. Press and hold for less than 2	
3	RST (Reset)	seconds for rebooting and for 10 seconds or longer for	
		factory initialization.	
4	PWR (power)	The power adapter, one of the device components, is	
4		connected into this slot.	



Section 2. Installation

2.1 Antenna connection

Connect a pair of antennas to the main body respectively as shown in Figure 4.



Figure 4. Antenna connection

2.2 Adapter connection

Connect the adapter to the main body as show in Figure 5. SWT225 has no power switch. Therefore power is supplied to the device upon connection of the adapter.





Figure 5. Adapter connection

2.3 Station connection

Fasten the two screws to the bottom of the main body of SWT225 as shown in Figure 6 to mount the stand.



Figure 6. Fastening of screws





Figure 7. A view of the bottom after the screws are fastened





Figure 8. Mounting of the stand



Section 3. Internet access

You can access the Internet via either WiFi or LAN.

3.1 Access via WiFi (wireless)

3.1.1 Detection of wireless network and access

Run wireless network detection on your computer and see what networks exist around it.

If SWT225 is included in the list of networks, double click on the SSID to access WiFi.

1 ¹¹ Wireless Network Connection				
Network Tasks	Choose a wireless network			
💋 Refresh network list	Click an item in the list below to connect to a <u>w</u> ireless network in range or to get more information.			
Set up a wireless network for a home or small office	((p)) sprint_skts_C8			
	Unsecured wireless network			
Related Tasks	((Q)) T wifi zone_secure_sprint			
Learn about wireless	Unsecured wireless network			
networking	((Q)) T wifi zone			
Change the order of preferred networks	Unsecured wireless network			
🍄 Change advanced	((Q)) T wifi zone_secure			
settings	🖡 🔓 Security-enabled wireless network (WPA2)			





3.1.2 View access to wireless network

Once access via WiFi is made, information is displayed as shown in Figure 10.

🖤 Wireless Network Connection Status 🛛 🔹 🔀		
General Support		
Connection		
Status:	Connected	
Network:	sprint_skts_C8	
Duration:	17:03:11	
Speed:	54.0 Mbps	
Signal Strength:		
Activity Sent —	- Received	
Packets: 15	3	
<u>Properties</u> <u>D</u> isable <u>V</u> iew Wire	eless Networks	
	<u>C</u> lose	

Figure 10. View access to wireless network

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🖤 Wireless Network Connection Status 🛛 🔹 💽		
General S	upport	
Connect	tion status	
21.	Address Type:	Assigned by DHCP
டன	IP Address:	192.168.2.101
	Subnet Mask:	255.255.255.0
	Default Gateway:	192.168.2.1
	<u>D</u> etails	
Windows connectio Repair.	did not detect problems with this on. If you cannot connect, click	Repair
		<u>C</u> lose

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Figure 11. View access to wireless network (IP address)



3.2 Access via LAN (wired)

3.2.1 Connection between SWT225 and PC

Connect between the LAN port of SWT225 and the Ethernet port of your PC using the LAN cable provided with the device.



Figure 12. Connection to the LAN port



3.2.2 View access to wired network

📥 Local Area Connection Status	? 🛛
General Support	
Connection	
Status:	Connected
Duration:	17:01:52
Speed:	100.0 Mbps
Activity	
Sent — 👘 –	- Received
Packets: 628	557
Properties Disable	
	<u>C</u> lose

Figure 13. View access to wired network

📥 Local A	rea Connection Status	? 🛛
General	Support	
Connec	tion status	
🛛 🥩 1	Address Type:	Assigned by DHCP
<u> </u>	IP Address:	192.168.2.100
	Subnet Mask:	255.255.255.0
	Default Gateway:	192.168.2.1
2 200000	Details	
Windows connecti Repair.	s did not detect problems with this on. If you cannot connect, click	Regair
		Close

Figure 14. View access to wired network (IP address)



Section 4. Trouble Shooting

For an uninterrupted Internet access, always make sure that the WiMAX modem is properly connected. No Internet access is available if the WiMAX modem is not connected to the base station. WEB CM access via WiFi or LAN, however, is available even when the WiMAX modem is not connected to the base station.

4.1 Checking via LEDs

You can verify that you have an Internet access based on the indication of the LEDs on SWT225.

LED	Color(s)		Function
Power		Flashes green	When power is supplied
	(ŗ	Flashes green	When WiFi AP is on
WiFi	(c)	Blinks green	When data is transmitted via WiFi
	LAN1	Flashes green	When access is made via LAN
LAN1/2	LAN1	Blinks green	When data is transmitted via LAN
	[©] 1 [®] 1	Flashes green	WiMAX strong electric field
	©10,	Flashes yellow	WiMAX weak electric field
WIMAX	©10,	Flashes red	Out of zone
	¢I¢I	Blinks yellow (every one min)	Connecting



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Blinks green and yellow	When WiMAX data is transmitted. Turned off when data is transmitted while on	
[©] I [®] 1	Flashes blue	Idle

4.2 Checking through WEB CM

You can verify that you have an Internet access at the WEB CM of SWT225. Access via wireless network (WiFi): If your terminal is connected to SWT225 via wireless network (WiFi), bring up the web browser on the terminal and type <u>http://192.168.2.1</u> to access the WEB CM of SWT225.

Access via the LAN port: If your terminal is connected to SWT225 via the LAN port (wired), bring up the web browser on the terminal and type <u>http://192.168.2.1</u> to access the WEB CM of SWT225.

Login name and password for WEB CM access: Sktelesys and sktelesys In the WEB CM page, go to WiMAX and Status to view connection information.



<u>open all close all</u>	Alessia WiMAX Status				
😼 Alessia	Let's take a look at the state	e status of WiMAX Network.			
Internet Settings	WiMAX 1		WiMAX 2		
Statistics BS List MRU Table Administration Settings Management	MAC Address	00:17:B2:FF:F4:FA	MAC Address	00:17:B2:FF:F4:FB	
	IP Address	10.30.21.21	IP Address	10.30.21.23	
	Subnet mask	255.255.255.0	Subnet mask	255.255.255.0	
	Default Gateway	10.30.21.1	Default Gateway	10.30.21.1	
	Domain Name Server	168.126.63.1	Domain Name Sever	168.126.63.1	
	Link Status	Connected	Link Status	Connected	
	BSID	F7 08 05 78 0B 3E	BSID	F7 08 05 78 0B 3E	
	UL PermBase	62	UL PermBase	62	
	DL PermBase	30	DL PermBase	30	
	Current preamble index	62	Current preamble index	62	
	Previous preamble index	0	Previous preamble index	62	
	HO count	0	HO count	0	
	HO fail count	0	HO fail count	0	
	Resync count	0	Resync count	0	
	HO signal latency	73	HO signal latency	69	
	Combined CINR	33	Combined CINR	32	
	Combined RSSI	-39	Combined RSSI	-39	
	RSSI	-50	RSSI	-39	
	RSSI deviation	0.0000	RSSI deviation	0.0000	
	RSSI2	-39	RSSI2	-51	
	RSSI2 deviation	0.0000	RSSI2 deviation	0.0000	
	PER	0.003670 [471/128349]	PER	0.000086 [19/219984]	
	Power control mode	1	Power control mode	1	
	Tx power	-4	Tx power	-34	
	Tx power maximum	27	Tx power maximum	27	
	Tx power headroom	61	Tx power headroom	-134	
	UL burst data FEC scheme	QPSK(CTC) 3/4	UL burst data FEC scheme	QPSK(CTC) 1/2	
	DL burst data FEC scheme	64-QAM(CTC) 5/6	DL burst data FEC scheme	64-QAM(CTC) 5/6	
	Frequency	2657000	Frequency	2657000	

Figure 15. Checking of WiMAX connection at WEB CM

FCC Warning

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.

(2)This device must accept any interference received, including interference that may cause undesired operation.

15.105 Federal Communications Commission (FCC) Requirements, Part 15

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 or more 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 RF Radiation Exposure Statement

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operation in conjunction with any other antenna or transmitter.