



# **SP700 MOBILE CONTENT SERVER**

## **DATASHEET**

Revision October 11<sup>st</sup>, 2008



---

© COPYRIGHT 2008 QWIKKER CORPORATION  
ALL RIGHTS RESERVED  
SPECIFICATIONS SUBJECT TO CHANGE

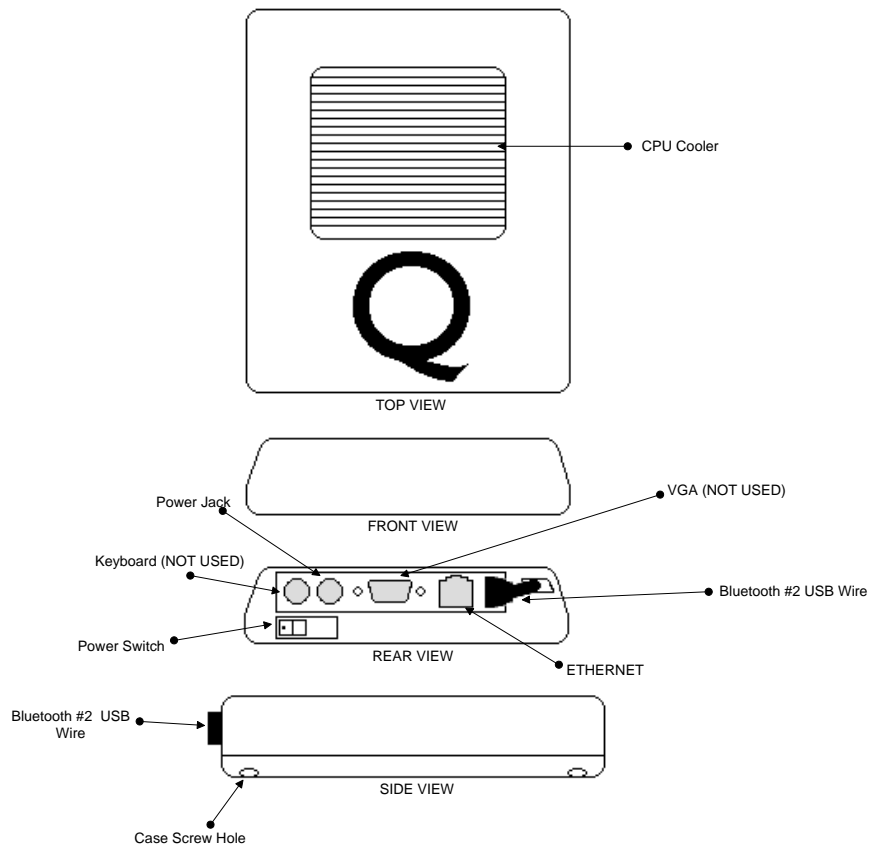
# 1 Product Description

The Qwikker SP700 Mobile Content Server is an on-premises communications, content, and application server. The MCS connects to end user mobile devices via the Bluetooth short-range wireless protocol, and connects to centralized Qwikker management servers via either GSM/GPRS cellular networks or Ethernet/Internet connections.

The MCS is intended for fixed operation and can be placed in a horizontal or vertical position. The MCS is housed in a plastic enclosure suitable for indoor operation.

The MCS can be powered via the included AC adapter. In addition to power and Ethernet connections the SP700 also provides an external USB host port for future peripheral support.

Physical and user attributes are shown in Figure 1.



## SETUP

The SP700 ships from the factory ready to use in your mobile Bluetooth campaign. The following steps should be used for setup:

1. Unpack SP700 and power supply.
2. Install SP700 at your location and plug power supply into SP700 first. See circular Power Jack in Figure 1.
3. Plug the SP700 into the wall socket.
4. Turn on SP700 using the Power Switch.

That's it. If you have a GPRS SIM chip installed in the SP700, the device will automatically connect up to your account on Qwiknet. If you do not have a GPRS SIM chip, you can use the Ethernet jack to connect to a standard Ethernet hub or switch.

## SIM CHIP INSTALLATION

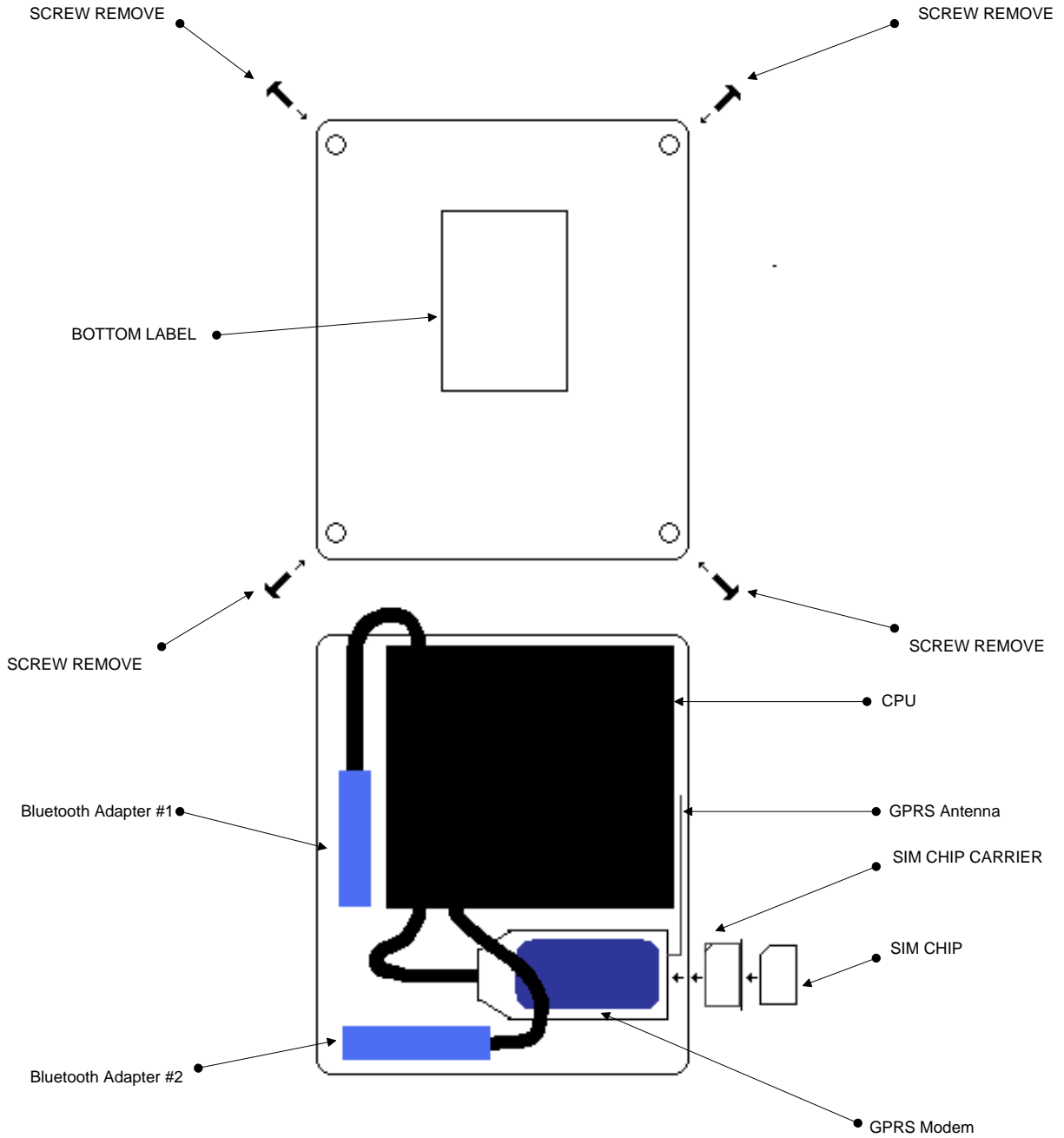
The SP700 SIM chip is easily replaced and requires only a Phillips screwdriver and a new SIM chip. Currently only T-Mobile is supported.

To Replace or Install a SIM chip follow these instructions:

**NOTE: YOU MUST FIRST CONFIGURE THE SP700 FOR THE DESIRED MOBILE OPERATOR OR YOU MAY NOT BE ABLE TO RECONFIGURE OVER GPRS. IT IS SUGGESTED THAT THE UNIT IS RECONFIGURED VIA ETHERNET AFTER SIM CHIP INSTALLATION AS NECESSARY.**

1. Turn the SP700 upside down. The product label should be facing up.
2. Unscrew the 4 retainer screws carefully.
3. Turn the unit over and remove the top cover plate.
4. Refer to the diagram in Figure 2. The GPRS Modem should be lifted slightly and the SIM Carrier and chip removed.
5. Swap in the new SIM chip.
6. Return GPRS modem to seated position.
7. Return Cover to unit and screw in 4 retaining screws.
8. Configure new GPRS settings through Qwiknet.

SIM Chip Changing Diagram in Figure 2.



## FAQ

### How do you know if you have a SIM Chip?

The GPRS SIM chip is a special order option. Please contact Qwikker for ordering information. It is unlikely that your SP700 shipped with a SIM chip without specific request for one.

### Can I use my own SIM Chip?

Yes, we currently support T-Mobile in the US. Contact Qwikker for additional international support.

### How do I know if the SP700 is on?

You will see a faint glow on the Ethernet indicators. If you have Ethernet connected you will see activity lights.

### How hot will the SP700 get?

The SP700 stays between 90 and 115 degrees Fahrenheit (32 to 46 Celsius). If ventilation is possible we suggest a ventilated installation. If not available, the SP700 is designed to work at high temperatures.

---

## **2 General Specifications**

### 2.1 Physical

Dimensions	180 x 160 x 40 mm
Weight	851 gm (30 ounces)
Housing	ABS/Polycarbonate blend
User Interface	ON/OFF power button
Ext. Connections	DC power, 6 VDC plug (for AC adapter) USB host port, Ethernet port
Unused	Keyboard, VGA

## 2.2 Environmental

Operating Temp.	0 to 50 ° C	Storage Temp.	-20 to 70 ° C
Humidity	95% RH non-condensing as per MIL-STD-810F 507.4		
Drop	1 m (3") drop to carpeted concrete		
Vibration	As per MIL-STD-810F 507.5 ESD As per EN61000-4-2		
Contact Discharge	+/-8kV		
Air Discharge	+/-15kV		

## 2.3 Functional

Wide Area	WirelessGSM/GPRS
Local Area	WirelessBluetooth up to 3 Mb/sec with EDR Range: 10m (30') Concurrent users: up to 14
Operating System	Linux 2.6
Application Server	Qwikker Service Point Application (proprietary)
Supported Devices	See published list.

## 2.4 Electrical

Processor	200 Mhz Intel Compatible CPU
Base Memory	128 MByte RAM 1Gb Flash – expandable to 8 Gb
Wireless Comms	GSM/GRPS module Two Bluetooth 2.0 modules
Wired Comms	10 Mbps Ethernet USB 2.0 Host

## 2.5 Accessories

AC Adapter	100 to 240 VAC Input Current: 0.6 A Input Frequency: 50 to 60 Hz Output Voltage: 6 VDC Output Current: 2 A Cord Length: Approx 1.8 m (6')North American and European variants.
Wall Mount	Not Included.

## 2.6 Regulatory Standards

### North America

Module Level GSM/GPRS module: FCC Part 24, ID IHDT6AC1, Bluetooth module: FCC Part 15 Section 15.247, ID KOC-901915

### Europe

Module Level GSM/GPRS module: EN301419-1 and EN300607-1, TYPE No: MT3-411A21 Bluetooth module: EN300328

---

## 3 Technical Specifications

### 3.1 GSM/GPRS

<b>Networks/ Bands</b>	GSM 900 MHz, DCS 1800 MHz, PCS 1900 MHz
<b>Data</b>	GPRS, multi-slot class 4, coding schemes CS1 to CS4 CSD, transparent and non-transparent modes
<b>Rx Sensitivity</b>	GSM: -107 dBm, DCS: -106 dBm, PCS: -104.5 dBm
<b>Tx Power</b>	GSM: 5 dBm to 33 dBm, DCS: 0 dBm to 30 dBm, PCS: 0 dBm to 30 dBm
<b>Antenna Gain</b>	GSM: -7 dBi (average) DCS: -4 dBi (average) PCS: 0 dBi (average)
<b>Internal Interface</b>	USB 2.0

### 3.2 Bluetooth Interfaces BT1 and BT2

<b>Specification</b>	Bluetooth 2.0 + EDR compliant
<b>Frequency Band</b>	2.4020 to 2.4800 GHz (79 channels)
<b>Modules</b>	Chipset: CSR 41814
<b>Device Type</b>	Class 1
<b>Rx Sensitivity</b>	-82 dBm (typical)
<b>Tx Power</b>	+6dBm RF transmit power with level control from on-chip 6-bit DAC over a

dynamic range > 30db

**Internal Interface**

USB 2.0

**Profile Support**

General Access Profile, Service Discovery Profile, Serial Port Profile, Object Push Profile (Server), File Transfer, Dial-Up, and LAN Access profiles.