

## Part I Product Overview

MU510D is a HSPA high-speed Internet data card, orientated to business customers and supports the main functions below:

- (1) Data Service;
- (2) Short Message Service;
- (3) Phone book business;
- (4) USSD Business (optional);
- (6) Voice service (optional);



## Part II Main Features

The main features of MU510D USB modem include:

- To support the HSPA / UMTS (2100/900MHz), GSM / GPRS / EDGE (850/900/1800/1900MHz)
- Support the Rx Diversity in WCDMA2100MHz
- Support for HSDPA Cat.8 (7.2 Mbps), HSUPA Cat.6 (5.76 Mbps, 2msec TTI), UMTS (384 Kbps), EDGE (237 Kbps), GPRS (85.6 Kbps)
- Support for SMS, phone book, PC Voice (optional), USSD (optional) Business
- Support USB 2.0 High speed
- Support for USB Mass Storage, the maximum capacity of 4G;
- support for CDROM, no CD-ROM automatically installs
- Support for plug-and-play
- Support for multiple languages on the PC suite
- Operating system support WINDOWS2000/XP/2003/VISTA/LINUX/MAC

## Part III Parameters and Application

**Table 1 Hardware and Software Specifications**

Item	Description
<b>Platform and Chipset</b>	
Baseband Chipset	Qualcomm MSM6290
NAND+SDRAM	512Mb+256Mb
<b>Hardware Specifications</b>	
Operating Frequency	<ul style="list-style-type: none"> <li>• <b>HSPA/UMTS2100MHz:</b> 1920MHz~1980MHz(Uplink)/2110MHz~2170MHz(Downlink)</li> <li>• <b>HSPA/UMTS900MHz:</b> 880MHz~915MHz (Uplink)/ 925MHz~960MHz (Downlink)</li> <li>• <b>GSM/GPRS/EDGE 850MHz:</b> 824MHz~829MHz(Uplink)/869MHz~894MHz(Downlink)</li> <li>• <b>GSM/GPRS/EDGE900MHz:</b> 880MHz~915MHz(Uplink)/925MHz~960MHz(Downlink)</li> <li>• <b>GSM/GPRS/EDGE1800MHz:</b> 1710MHz~1785MHz(Uplink)/1805MHz~1880MHz(Downlink)</li> <li>• <b>GSM/GPRS/EDGE1900MHz:</b> 1850MHz~1910MHz(Uplink)/1930MHz~1990MHz(Downlink)</li> </ul>
Network Supported	HSPA/UMTS 2100/900 MHz (Rx Diversity in WCDMA2100MHz) GSM/GPRS/EDGE 850/900/1800/1900MHz
Power Class	UMTS/HSPA 2100MHz: +24dBm +1/-3dB (Power Class 3) UMTS/HSPA 900MHz: +24dBm +1/-3dB (Power Class 3) GSM/GPRS 850/900MHz: +33dBm +/-2dB (Power Class 4 ) GSM/GPRS 1800/1900MHz: +30dBm +/-2dB (Power Class 1 ) EDGE 900MHz: +27dBm (Power Class E2) EDGE 1800/1900MHz: +26dBm (Power Class E2)
Maximum Power Consumption	<=2.5W
Antenna	Built-in MONOPOLO antenna Frequency range: 824-960 MHz, 1710-2170 MHz Input impedance: 50 Ohm VSWR: less than 3.5 for all frequency points Efficiency: all frequencies greater than 35% Power capacity: 2W Polarization forms: vertical polarization
<b>Software Specifications</b>	
Data Service	HSPA 7.2Mbps HSDPA / 5.76Mbps HSUPA

## WCDMA/HSPA USB Modem Datasheet

	UMTS DL/UL 384 K bps GPRS DL 85.6 kbps / UL 42.8 kbps EDGE 3GPP R4, Category 12, DL 237k bps / UL 118K bps
Short Message Service	Support SMS
Software Installation	Auto installation of PC suite and driver
<b>Interface Specifications</b>	
USB	Mini-USB interface; USB2.0 High Speed
SIM/USIM Card Slot	Standard 6-pin SIM card interface, in line with the 3GPP31.101 and 31.102
Power Supply	+5V Power Supply via USB interface
AT Interface	Support 3GPP TS27.005/3GPP TS27.007
LED Indicator	Blue LED: USB port connected successfully Red/green LED: Red - Access to GSM Green - Access to UMTS
T-Flash Card Slot	Maximum Capacity: 4G
<b>Physical Features</b>	
Unit Size (mm)	80x 25 x 10.5 (including USB)
Weight	About 27g
Color	Silver-Black
Optional ID/Appearance	Four groups (If required, the picture and sample can be presented)
<b>Operation Environmental Requirements</b>	
Temperature	Operating Temperature: -10°C~55°C
	Storage Temperature: -20°C~70°C
Humidity	Operation Humidity: 10%~90%
	Storage Humidity: 5%~93%
System Requirements	Supporting Windows 2000/XP/2003/VISTA/7 Linux(Kernel 2.6 and above) MAC OS(10.5.X and above)
	CPU: Pentium 500MHz or above Memory: 128MB RAM or more Hard Disk: 50MB free space Standard USB interface

**Table 2 PC suite Specifications**

Item	Description
Connect to Internet	Choose the target profile and click the connect button to access the Internet
Statistics	Display the connect time, speed and flux of the upload and download
SMS	Create, Delete, Send, Reply, Forward, and Search message
Phone book	Create, Edit, Delete and Search the phonebook
PIN Management	Enable, Disable or Modify the PIN Code

## WCDMA/HSPA USB Modem Datasheet

Network Type	UMTS/HSDPA Only UMTS/HSDPA Preferred GPRS/EDGE Only GPRS/EDGE Preferred
Network Register	Automatically or Manually
Profile Management	Create, Edit or Delete Profile, set the default Profile
SMS Setting	Text Message Setting Center and set attributes
Language Settings	Basic options: Simplified Chinese, Traditional Chinese, English Multiple Languages can be customized.

**Table 3 Approvals & Certifications**

Item	Description
Regulatory compliance	CE/FCC
Safety regulations	UL
Environmental standards	RoHS
Microsoft WHQL Certified Drivers	Certificated

**Table 4 Standard Package**

Item	Description
USB Modem Unit	1 PCS
Extensional USB Cable	1 PCS
Quick Start Manual	1 PCS