PCI Express Mini 3G Adapter Card, RoHs

MPCIE-3G Quick Installation Guide Version 1.0

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Package Contents:

MPCIE-3G package includes the following items:

- 1 x MPCIE-3G PCI Express Mini 3G adapter card
- 1 x Driver CD
- 1 x RF antenna cable (optional)
- 1 x GSM antenna cable (optional)



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1.1 Specifications

	MPCIE-3G
	GSM/GPRS/EDGE :
Frequency Bands	Dual band GSM 900 / 1800 MHz
Frequency banus	UMTS/HSPA+ :
	Dual band UMTS 900/2100MHz
	Class 4 (+33dBm 2dB) for EGSM900
	Class 1 (+30dBm 2dB) for GSM1800
	Class E2 (+27dBm 3dB) for GSM900 8-PSK
Output Power (according to Release	Class E2 (+26dBm+3 /-4dB) for GSM1800 8 - PSK
99, V5)	Class 3 (+24dBm +1/-3dB) for UMTS 2100, WCDMAFDD BdI
	Class 3 (+24dBm +1/-3dB) for UMTS 900, WCDMAFDD BdVIII
Power supply	3V < VMAIN < 3.6V
Operating	Normal operation: -30 ℃ to +85 ℃
(Reard Temperature)	Restricted operation: -40 ℃ to +95 ℃
(Board Temperature)	· · · · · · · · · · · · · · · · · · ·
Storage Temperature	-40 ℃ to +95 ℃
Physical Dimensions	50.95 mm x 30 mm x 4.75 mm
	Microsoft Windows 8
	Microsoft Windows 7
Supported OS	Microsoft Windows Vista
	Microsoft Windows XP
	Linux Kernel 2.4.31 (and above)

HSPA		
3GPP Release 6. 7	DL 7.2Mbps, UL 5.7Mbps HSDPA Cat.8 / HSUPA Cat.6 data rates	
,	Compressed mode (CM) supported according to 3GPP TS25.212	
UMTS		
2GPP Polozoo 4	PS data rate 384 kbps DL / 384 kbps UL	
3GPP Release 4	CS data rate 64 kbps DL / 64 kbps UL	
GSM/GPRS/EGPRS		
	GPRS:	
	Multislot Class 12	
	Full PBCCH support	
	Mobile Station Class B	
	Coding Scheme 1 4	
	EGPRS:	
	Multislot Class 12	
	EDGE E2 power class for 8 PSK	
	Downlink coding schemes CS 1-4, MCS 1-9	
	Uplink coding schemes CS 1-4, MCS 1-9	
Data Transfer	SRB loopback and test mode B	
	8-bit, 11-bit RACH	
	PBCCH support	
	1 phase/2 phase access procedures	
	Link adaptation and IR	
	NACC, extended UL TBF	
	Mobile Station Class B	
	CSD:	
	V.110, RLP, non-transparent	
	14.4kbps	
	USSD	

	Point-to-point MT and MO
	Cell broadcast
SMS	Text and PDU mode
	Storage: SIM card plus SMS locations in mobile equipment
Interface	
Antenna	50Ohms. Main GSM/UMTS antenna
USB	USB 2.0 High Speed (480Mbit/s) device interface,
	Full Speed (12Mbit/s) compliant
	ASC0:
	8-wire modem interface with status and control lines, unbalanced,
	asynchronous
	Adjustable baud rates: 1,200bps to 921,600 bps
	Autobauding: 1,200bps to 921,600bps
Serial Interface	Supports RTS0/CTS0 hardware flow control.
	Multiplex ability according to GSM 07.10 Multiplexer Protocol.
	ASC1:
	4-wire, unbalanced asynchronous interface
	Adjustable baud rates: 1,200bps to 921,60 bps
	Supports RTS1/CTS1 hardware flow control

1.2 Hardware Installation

- Step 1: Install the MPCIE-3G card into the PCIe Mini full-size slot of the system. Please refer to the system manual for the detail installation instruction.
- Step 2: Connect the RF antenna cable to the RF antenna connector on the MPCIE-3G.



- Step 3: Insert a SIM card into the SIM card slot on the MPCIE-3G.
- **Step 4:** Connect the GSM antenna cable to the RF antenna cable connector.
- Step 5: Power up the system.

1.3 Software Installation

- Step 1: Insert the MPCIE-3G driver CD into the system.
- Step 2: Open the Device Manager. Right click on Cinterion Wireless Modules Suspend under Other devices and select Update Driver Software.





There are seven further EHx ports located under "Other devices" that are reserved for future use. The ports numbered 3, 4 and 5 provide an AT command interface to the module via USB. Install the INF file for these ports in the same way as for the USB modem if necessary. Step 3: The Hardware Update Wizard appears. Select "Yes, this time only" and click **Next** to continue.

Hardware Update Wizard	
	Welcome to the Hardware Update Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on
	the Windows Update Web site (with your permission). Read our privacy policy Can Windows connect to Windows Update to search for software?
	 Yes, this time only Yes, now and every time I connect a device No, not this time
	Click Next to continue.
	< Back Next > Cancel

Step 4: Select "Install the software automatically" and click Next.

Hardware Update Wizard	
	This wizard helps you install software for: EHx If your hardware came with an installation CD or floppy disk, insert it now. What do you want the wizard to do?
	 Install the software automatically (Recommended) Install from a list or specific location (Advanced)
	Click Next to continue.
	< Back Next > Cancel

Step 5: The Hardware Installation warning windows appears. Click "Continue Anyway".

Hardwar	re Installation
1	The software you are installing for this hardware: Cinterion EHx USB Modem has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Step 6: The system starts installing drivers.



Step 7: When the Hardware Update Complete window appears, click **Finish** to close the wizard.



Step 8: The Cinterion EHx USB Modem appears in the Device Manager under Modems.



Step 9: Right click the Cinterion EHx USB Modem on the Device Manager and select **Properties**. Click the **Modem** tab to display the selected COM port as well as the maximum port speed.

Driver	Details	Power	Management
General	Modem	Diagnostics	Advanced
ort: COM8			
Speaker volu	me		
Lou	-	- High	
LUM		ringin	
Maximum Port	Speed		_
921	600	×	
Dial Control			
Dial Control			
Dial Control	/ait for dial tone befo	re dialing	
Dial Control	/ait for dial tone befo	re dialing	
Dial Control –	/ait for dial tone befo	re dialing	
Dial Control	/ait for dial tone befo	re dialing	

Step 10: Click the Advanced tab to specify the Extra Initialization Commands:

AT+CGDCONT=1,"IP","[APN]"



[APN] stands for the APN information provided by the MNO of the SIM card installed on the MPCIE-3G. Ensure that the SIM card does not require a PIN.

General Modem Diagnostics Advanced Extra Settings Extra initialization commands: AT+CGDCONT=1,"IP","fetnet01)"	Driver	Details	Power	Management
Extra Settings Extra initialization commands: AT+CGDCONT=1,"IP","fetnet01f"	General	Modem	Diagnostics	Advanced
	Extra Settings Extra initializa AT+CGDCO	tion commands: NT=1,''IP'',''fetnet01	ľ	

1.4 Create a Connection

- Step 1: Open Control Panel. Select Network and Internet Connections → Network Connections. Click "Create a new connection".
- Step 2: The New Connection Wizard appears. Click Next to continue.

New Connection Wizard	
S	Welcome to the New Connection Wizard
	This wizard helps you:
AP-	Connect to the Internet.
V PASA	 Connect to a private network, such as your workplace network.
	Set up a home or small office network.
K	To continue, click Next.
	K Back Next > Cancel

Step 3: Select a network connection type. Click **Next** to continue.

New Connection Wizard
Network Connection Type What do you want to do?
 Connect to the Internet Connect to the Internet so you can browse the Web and read email. Connect to the network at my workplace Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location. Set up a home or small office network Connect to an existing home or small office network or set up a new one.
Set up an advanced connection Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it. < Back

Step 4: Select "Set up my connection manually". Click Next to continue.

New Connection Wizard
Getting Ready The wizard is preparing to set up your Internet connection.
How do you want to connect to the Internet?
Choose from a list of Internet service providers (ISPs)
Set up my connection manually
For a dial-up connection, you will need your account name, password, and a phone number for your ISP. For a broadband account, you won't need a phone number.
○ Use the CD I got from an ISP
< Back Next > Cancel

Step 5: Select "Connect using a dial-up modem". Click **Next** to continue.

New Connection Wizard
Internet Connection How do you want to connect to the Internet?
 Connect using a dial-up modem This type of connection uses a modem and a regular or ISDN phone line. Connect using a broadband connection that requires a user name and password This is a high-speed connection using either a DSL or cable modem. Your ISP may refer to this type of connection as PPPoE. Connect using a broadband connection that is always on This is a high-speed connection using either a cable modem, DSL or LAN connection. It is always active, and doesn't require you to sign in.
< Back Next > Cancel

Step 6: Type a name for this connection. Click **Next** to continue.

Connection What is t	Name the name of the service that provides your Internet connection?
Type the r	name of your ISP in the following box.
ISP Name	
3G	

Step 7: Enter the Internet Service Provider settings in the following two setup windows. The information should be provided by the MNO of the installed SIM card, including phone number, user name and password. Click **Next** to continue.

New Connection Wizard		
Phone Number to Dial What is your ISP's phone number?		
Type the phone number below. Phone number:		
*99#		
You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telephone. If you hear a modem sound, the number dialed is correct.		
< Back Next > Cancel		
New Connection Wizard		
Internet Account Information You will need an account name and password to sign in to your Internet account.		
Type an ISP account name and password, then write down this information and store it in a safe place. [If you have forgotten an existing account name or password, contact your ISP.]		
User name:		
Password:		
Confirm password:		
Use this account name and password when anyone connects to the Internet from this computer		
Make this the default Internet connection		
<pre></pre>		

Step 8: The setup steps are completed. To create the connection and close the wizard, click **Finish**.

New Connection Wizard		
	Completing the New Connection Wizard You have successfully completed the steps needed to create the following connection: 36 • Make this the default connection • Share with all users of this computer • Use the same user name & password for everyone	
	The connection will be saved in the Network Connections folder. Add a shortcut to this connection to my desktop To create the connection and close this wizard, click Finish.	
< Back Finish Cancel		