USB Driver

Installation Guide for H5 and G3 Devices

USB Driver Installation Guide

For the following devices: MTSMC-H5-U, MTD-H5, MTPCIE-H5, MT100UCC-H5, MTC-H5-B03, MTCBA-H5-U, MTC-G3

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Installing on Linux

The Linux OS includes a generic USB driver for modems supporting CDC/ACM.

To install the device on Linux Kernel 2.6.x and newer with CDC/ACM support, connect USB cable from the device to a USB port on your computer. For most recent Linux distributions, there are no drivers to install.

If the operating system recognizes the modem, seven devices are created (assuming no other ACM values have been assigned):

- /dev/ttyACM0
- /dev/ttyACM1
- /dev/ttyACM2
- /dev/ttyACM3
- /dev/ttyACM4
- /dev/ttyACM5
- /dev/ttyACM6

Only the following devices can be used for AT commands:

- /dev/ttyACM0 (data port for PPP connections and AT commands)
- /dev/ttyACM3 (generic port for AT commands)

Troubleshooting Linux

If Linux does not create devices, check for the kernel module:

lsmod | grep cdc_acm

If entries aren't found, load the kernel module with root privileges:

modprobe cdc-acm

If this returns an error response, such as # FATAL: Module cdc-acm not found, the kernel module is not on your system. You will need to build the driver.

Building a Linux Driver

If your system is missing the Linux driver:

1. Retrieve the appropriate kernel source code version for your system. This should be in your OS distribution package. Unpack it.
2. In its root directory type: **# make menuconfig**
3. Configure the kernel according to your system configuration,
4. Browse to menu **Device Driver > USB Support** and select **USB Modem (CDC ACM) support**.
5. To start the build once configured, type **# make**

The kernel module cdc-acm.ko is in the directory drivers/usb/class. If the kernel was built previously, compile the module by typing:

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    # make M=drivers/usb/class

To load the module use modprobe or insmod.

Windows Release Notes

We tested h5-g3-usb-windriver_8.00.04-1.zip driver on the following Windows operating systems.

- **Windows 8 x86 and x64, Windows 7 x86 and x64, Vista x86 and x64, XP x86 and x64, Windows Server 2012, Windows Server 2008 x86 and x64, and Windows Server 2003 x86**
  - Drivers install correctly, but may require .NET Framework version 3.5 or older.
  - After installing the driver for this device, the device may not be available when Windows comes out of a sleep/hibernate state. To correct this issue, unplug the device from the USB port and then plug it back in to the same port.
- **Windows Server 2003 x64**
  - Not supported.

Downloading the Windows USB Driver

If you haven't downloaded the driver:

1. Go to the Multi-Tech Support page, www.multitech.com/support.go and select your product from the Product Families drop down list.
2. Click **Drivers**.
3. Select **h5-g3-usb_windriver_8.00.04-1.zip** and **Save** the driver to your computer.
4. Extract the files to your computer.

Windows Notes

Installing on USB Host Powered Devices

(MTD, MTC, MTCBA, or MT100UCC)

When you connect a USB host powered device to a computer through a USB cable, the Windows **Add New Hardware Wizard** may display **Cannot Install this Hardware**. If this occurs, click **Finish**. Windows detects additional devices and prompts you to install them.

Installing on Non-USB Powered Devices

(MTSMC, MTPCIE, MTR, MTCMR)

Turn on the device and wait 15 seconds before connecting the USB cable. If you connect the USB cable before supplying power to the device, the Windows **Add New Hardware Wizard** may appear and show **Cannot Install this Hardware**. If this occurs, click Finish. Windows detects additional devices and prompts you to install the additional devices. If Windows does not detect new device, unplug the USB cable, turn the device off and on, wait 15 seconds, insert the USB cable, and install devices when prompted.

Installing on Windows 8, 7 or Vista

This process installs multiple drivers and ports.

Note: If you previously installed USB drivers for this device, uninstall them before installing or re-installing this driver. Uninstall all existing drivers for this device. Refer to Uninstall Windows Drivers for details.

Before you connect the device (disconnect the device if you connected it):

CAUTION: If you connected the device before installing the drivers, Windows may install drivers automatically. Your device may not operate correctly with these drivers. Uninstall the drivers before proceeding. See Remove Microsoft Installed Drivers for details.

1. Go to the location where you extracted the driver and open the **H5-G3-USB\Driver** folder.
2. Right-click on **TelitUSBInstaller_In_U8.00.04.exe** and select **Run as Administrator**.
3. Click **Yes** or **Allow** to allow the installer to make changes to your computer.
4. Click **Next** and follow the instructions in the installation wizard.
5. Click the **Install** option when prompted, for example, Install this driver software anyway.
6. Click **Finish.**
7. Connect USB cable from the device to a USB port on your computer. Windows indicates when the device is ready to use.

Installing on Windows XP

This process installs four drivers.

> **Note:** If you previously installed USB drivers for this device, uninstall them before installing or re-installing this driver. Uninstall all existing drivers for this device. Refer to Uninstall Windows Drivers for details.

Before you connect the device (disconnect the device if you connected it):

1. Go to the location where you extracted the driver and open the **H5-G3-USB\Driver** folder.
2. Right-click on **TelitUSBInstaller_In_U8.00.04.exe** and select **Run**.
3. Click **Next** and follow the instructions in the installation wizard.
4. Click **Continue Anyway** each time this screen appears.

5. Click **Finish.**
6. Connect USB cable from the device to a USB port on your computer. After it detects the hardware, Windows opens the New Hardware Wizard.
7. Select **No, not this time** and click **Next.**
8. Select **Install the software automatically (Recommended)** and click **Next.**
9. Select **Finish.**
10. Repeat Steps 7-9 for each additional New Hardware Wizard. Windows indicates when the device is ready to use.

Uninstalling Windows Drivers

Note: Disconnect the device before uninstalling drivers.

Windows 8

To uninstall drivers from Windows 8:

1. Open Windows **Programs and Features**.
2. Uninstall **Windows Driver Package – Intel Mobile Communications (flashusb) USB**.
3. Uninstall all **Telit modems, ports, and USB drivers**.

Windows 7 or Vista

To uninstall drivers from Windows 7 or Vista:

1. Open **Programs and Features** from the Windows Control Panel.
2. Uninstall the **Windows Driver Package – Telit Wireless Solutions (telitusbser) Modem**.
3. Uninstall all **Telit modems, ports, and USB**.
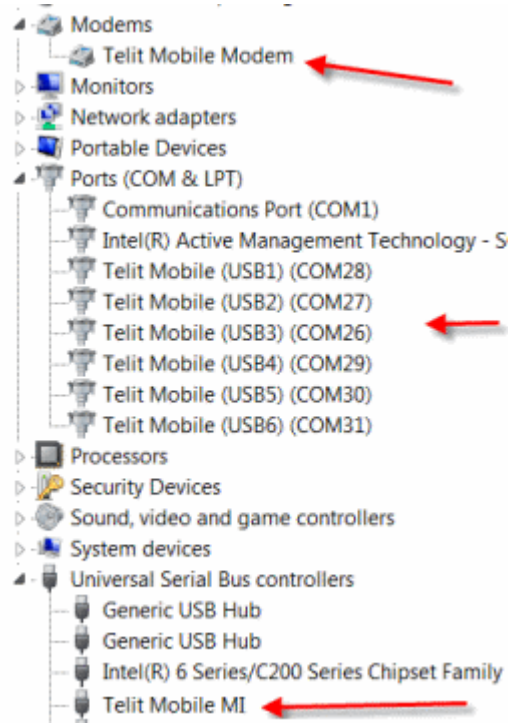
Windows XP

To uninstall drivers from Windows XP:

1. Open the **Control Panel** and go to **Add or Remove Programs**.
2. Uninstall **Windows Driver Package – Telit Wireless Solutions (telitusbser) Modem**.
3. Uninstall all other **Telit modems, Ports and USB**.

Remove Microsoft Installed Drivers

If using Windows 7 and connect the device before installing drivers, Windows Update automatically installs drivers. Your device may not operate correctly with these drivers. To remove these drivers:

1. With the device plugged in, open the **Device Manager.**

2. Right-click on the Telit Mobile Modem and select **Uninstall.**
3. Select **Delete the driver software for this device** and click **OK**.
4. Repeat the removal steps to uninstall each Telit port and the Telit Universal Serial Bus Control.

Developer Note

By default each time an H5 or G3 device with a different IMEI value is connected using this USB driver, the operating system will not require searching for the drivers again and uses the same ports created in a previous installation. To prevent this, use the utility included with the driver download to manage port creation as follows.

To enable USB IMEI identification, where the operating system creates a new set of ports with different COM enumeration for each H5 device with a different IMEI value:

1. Uninstall the driver if already installed.
2. Double-click the enable USB IMEI file for your model in the folder where you extracted the driver files.
   - For H5: **H5_enable_USB_IMEI_indentification.reg**
   - For G3: **G3_enable_USB_IMEI_indentification.reg**
3. Install the driver as normal.

To disable USB IMEI identification (driver default setting):

1. Uninstall the driver if already installed.
2. Double-click the disable USB IMEI file for your model in the folder where you extracted the driver files.
   - For H5: **H5_disable_USB_IMEI_indentification.reg**
   - For G3: **G3_disable_USB_IMEI_indentification.reg**
3. Install the driver as normal.