

This document is intended to help trouble-shoot USB port driver installation problems with following series:

- PS 5000
- PSI 5000
- ELR 9000
- PSI 9000 2U/3U
- PS 9000 2U/3U

Background: By default, **Windows XP, Windows 7** and **newer** operating systems should all host a so-called Virtual COM Port driver (short: VCOM), which generates virtual serial ports in Windows OS to emulate standard COM ports. These ports can usually be found in the Windows Device Manager, in section "Ports & Terminals". The driver itself is just a file named **usbser.sys**. However, in some situations, the driver is not installed on the system or is refused by the OS to be installed, because it is not digitally signed.

### Problem situation 1: Windows 8 and 8.1, digital driver signature missing

**Reason:** Although the driver is part of Windows 8, it is not digitally signed and thus Windows 8 will refuse to install it.

**Solution:** Check this website for instructions to circumvent this restriction:

<http://www.addictivetips.com/windows-tips/how-to-install-any-digitally-unsigned-drivers-on-windows-8/>

### Problem situation 2: Device and driver cannot be installed on Windows XP, Windows 7 or Windows 8

**Reason:** on some installations of Windows XP or 7, the driver file *usbser.sys* is missing. Unfortunately, the **INF** (*/Nstallation File*), which is required for the installation of the USB port of the above mentioned devices, can only install the USB port correctly with the driver file being present in locations on your system where it is expected, but the INF cannot install the driver file itself. For use with Windows Embedded version and possibly other Windows version it is provided in a folder on the "Drivers & Tools" CD, in a folder named "Windows Embedded".

**Solution 1:** First check the various Windows file repository locations for the source driver file to be in at least one of these folders, which should be created during a standard Windows installation:

#### 32bit OS

Primary:

C:\Windows\System32\DriverStore\FileRepository\mdmcpq.inf\_x86\_neutral\_9f203c20b6f0dabd\usbser.sys

Secondary:

C:\Windows\winsxs\x86\_mdmcpq.inf\_31bf3856ad364e35\_6.1.7600.16385\_none\_72eaf415161ee2be\usbser.sys

C:\Windows\winsxs\x86\_mdmcpq.inf\_31bf3856ad364e35\_6.1.7601.17514\_none\_751c07dd130d6658\usbser.sys

#### 64bit OS

Primary:

C:\Windows\System32\DriverStore\FileRepository\mdmcpq.inf\_amd64\_neutral\_b53453733bd795bc\usbser.sys

C:\Windows\System32\DriverStore\FileRepository\mdmcpq.inf\_amd64\_neutral\_fbc4a14a6a13d0c8\usbser.sys

Secondary:

C:\Windows\winsxs\amd64\_mdmcpq.inf\_31bf3856ad364e35\_6.1.7601.22436\_none\_d1b08653e497013b\usbser.sys

C:\Windows\winsxs\amd64\_mdmcpq.inf\_31bf3856ad364e35\_6.1.7601.18247\_none\_d11d1800cb809992\usbser.sys

C:\Windows\winsxs\amd64\_mdmcpq.inf\_31bf3856ad364e35\_6.1.7601.17514\_none\_d13aa360cb6ad78e\usbser.sys

In case the driver file is missing in any of these locations, copy from another and in case it is missing in all locations, skip to the solution of problem situation 3.

### Problem situation 3: Device cannot be installed on Windows 7 Embedded

**Reason:** USB driver is not included in Windows Embedded

**Solution:** Install the driver from the extra folder "Windows Embedded", as it can found on the supplied CD. Alternatively, see Problem 2, solution 2.