

<b>Classification</b>	<input checked="" type="checkbox"/> tDS/tGW/tSH	<input type="checkbox"/> PETL/tET/tPET/ET-2200	<input type="checkbox"/> DS/PDS/PPDS	<input type="checkbox"/> tM-752N	
	<input type="checkbox"/> I/O Card	<input type="checkbox"/> VXC Card	<input type="checkbox"/> TouchPAD/HMIWorks	<input type="checkbox"/> VxComm	
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## Q: What is the difference in USB/Ethernet Download speed of TouchPAD?

A: TouchPAD provides Ethernet and USB methods to download the applications. Depending on the system environment, the speed of downloading through Ethernet and USB will be different, as detailed below:

There are some test results when downloading 12 MB file:

Operating system		USB	Ethernet		
		Download Time	Via HUB/Switch	Download Time	Direct Connection to PC Download Time
Windows 10	Intel i3-3220 CPU @ 3.30GHz 3.30GHz , RAM 8G	2m 25s	NS-208PSE	2m 40s	2m 20s
Windows 10	Intel i5-2400 @ 3.10 GHz, 3.30 GHz, RAM 8G	4m 20s	NS-208PSE	9 m 50s	-
Windows 10	Intel i5-7400 @ 3.00GHz, 3.00GHz, RAM 8G	2m 35s	-	-	-
Windows 7	Intel Core2 Q9400 @ 2.66GHz 2.67GHz, RAM 4G	7m 06s	-	-	-
Windows XP	Intel i5-3350P @ 3.10GHz 3.09GHz, RAM 3.46G	2m 26s	-	-	-
Windows XP	Intel Core 2 E4500, @ 2.20GHz 2.20GHz, RAM 3G	7m 15s	NS-208PSE	5m 50s	3m 32s

Regardless of using USB or Ethernet download method, their download speed will be affected by system performance and software environment. Usually, the download speed would be better when less software installed on the system. It is recommended to use a computer with a clean software environment and fast CPU.

When using Ethernet download, it is recommended to keep the network environment simple or connect the TouchPAD directly to the computer without Ethernet Switch. These above can effectively improve the download speed.

**Since each system environment is different, we would recommend trying both ways, and then selecting the most suitable download method.**