Battery And Charging Ports

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List of Power supply Requirements

Surface Book

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1800	1832?	Surface Book 2 13" (without Nvidia GPU)	44W	39W	NFC	15 volts @ 2.58 amps	5W (5 volts @ 1 amp)
1932	1899	Surface Book 3 15"	127W	120W	120W	15 volts @ 8 amps	7.5W (5 volts @ 1.5 amps)
1798	Surface_Book	Surface Book with Performance Base	102W	95W	NFC	15 volts @ 6.33 amps	7.5W (5 volts @ 1.5 amps)
	1832_dGPU?	Surface Book 2 13" (with Nvidia GPU)	102W	95W	NFC		
	1793	Surface Book 2 15"	102W	95W	NFC		
	1900_dGPU?	Surface Book 3 13.5" (with Nvidia discrete GPU)	102W	95W	NFC		
1706	Surface_Book	Surface Book (with Nvidia GPU)	65W	60W	NFC	15 volts @ 4 amps	5W (5 volts @ 1 amp)

1900?	Surface Book 3 13.5" (without Nvidia discrete GPU)	65W	60W	80W			
1625	Surface_Book	Surface Book (without Nvidia GPU)	36W	31W	NFC	12 volts @2.58 amps	5W (5 volts @ 1 amp)

Surface Laptop

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1800		Surface Laptop (1st Gen)	44W	39W	NFC	15 volts @ 2.58 amps	5W (5 volts @ 1 amp)
	1769	Surface Laptop 2	44W	39W	NFC		
1706		Surface Laptop 3	65W	60W	60W	15 volts @ 4 amps	5W (5 volts @ 1 amp)
		Surface Laptop 4	65W	60W	60W		
	1796	Surface Laptop 5	65W	60W	60W		
1963	2033	Surface Laptop 6 for Business 13.5"	39W	39W	60W	15 volts @ 2.6 amps	No USB port
	2036	Surface Laptop (7th Edition) 13.8"	39W	39W	60W		
2062	2035	Surface Laptop 6 for Business 15"	65W	45W	60W	15 volts @ 4 amps	5W (5 volts @ 1 amp)
	2037	Surface Laptop (7th Edition) 15"	65W	45W	60W		

Non-Microsoft power supply	Surface Laptop SE (has standard DC power jack)	45W	45W	45W	19 volts @ 2.37 amps	No USB port

Surface Studio

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1798	1964 | ?	Surface Laptop Studio (with Nvidia discrete GPU)	102W	95W	95W	15 volts @ 6.33 amps	7.5W (5 volts @ 1.5 amps)
	2029 | ?	Surface Laptop Studio 2	102W	95W	95W		
1932	2029 | ?	Surface Laptop Studio 2 (dGPU)	127W	120W	120W	15 volts @ 8 amps	7.5W (5 volts @ 1.5 amps)
1706	1964 | ?	Surface Laptop Studio (without Nvidia discrete GPU)	65W	60W	60W		5W (5 volts @ 1 amp)

Surface Pro

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1536		Surface Pro (1st Gen)	**48W**	48W	NFC		No fast charge
		Surface Pro 2		48W	NFC		
1625		Surface Pro 3	**36W**	31W	NFC	12 volts @2.58 amps	5W (5 volts @ 1 amp)

	Surface Pro 4	31W	NFC				
1735		Surface Pro 4 Core M SKU	**24W**	24W	NFC	15 volts @ 1.6 amps	No USB port
	1807?	Surface Pro (5th Gen) M3 SKU		39W	NFC		
1800	1796	Surface Pro (5th Gen)	**44W**	39W	NFC	15 volts @ 2.58 amps	5W (5 volts @ 1 amp)
	1807	Surface Pro (5th Gen) with LTE Advanced		39W	NFC		
	1796	Surface Pro 6		39W	NFC		
1706	2010 | 1876 | H	Surface Pro X WIFI & SQ1, SQ2	**65W**	60W	NFC	15 volts @ 4 amps	5W (5 volts @ 1 amp)
	1866	Surface Pro 7		60W	NFC		
	1960 | 1961	Surface Pro 7+ & LTE		60W	NFC		
	1983 | 1982	Surface Pro 8 & LTE		60W	60W		
	2038	Surface Pro 9		60W	60W		
1963	1997 | 1996	Surface Pro 9 with 5G	**39W**	39W	60W	15 volts @ 2.6 amps	No USB port
	2079	Surface Pro 10 for Business		39W	45W		
	2077 | 2078 | 2121	Surface Pro 10 for Business with 5G		39W	45W		
	2076 | 2085	Surface Pro (11th Edition)		39W	60W		

2077 | 2078	Surface Pro (11th Edition) with 5G	39W	60W				

Surface Go

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1735 And 1736		Surface Go	**24W**	24W	24W		No USB port
		Surface Go with LTE Advanced		24W	24W		
		Surface Go 2		24W	30W		
		Surface Go 2 with LTE Advanced		24W	30W		
		Surface Go 3		24W	30W		
		Surface Go 4		24W	30W		
1963	1943	Surface Laptop Go	**39W**	39W	39W		No USB port
	2013	Surface Laptop Go 2		39W	39W		
	2013	Surface Laptop Go 3		39W	39W		

Surface 3

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1623		Surface 3	14W	14W		5.2 volts @ 2.5 amps	No USB port

Surface Dock

Power ID	SKU	Surface model	Actual	Min	Recommended		USB power on charger
1749		Surface Dock	90W (up to 60W passthrough to device)	90W		15 volts @ 6 amps	No USB port
1931		Surface Dock 2	199W (up to 120W passthrough to device)	199W		15.35 volts @ 12.96 amps	No USB port
2055		Surface Thunderbolt ™ 4 Dock	165W (up to 96W passthrough to device)	165W		22 volts @ 7.5 amps	No USB port
Source		Surface power supplies and charging requirements - Microsoft Support					
Source		Surface System SKU reference					

Troubleshoot Charger | No LED light | LED Flashing | Not Charging

Surface device have no LED light or LED flashing.

Troubleshooting steps: Clean the charging port

What you you need:

- **Rubbing alcohol and cotton ball swabs, If your using a ear pick, you may need to remove the top part in order for it to fit into the port, You will dip it into the alcohol and then clean it.**

Step 1: Inspect the Charger



1. **Check the Power Source**
   - Plug the charger into a different outlet to rule out a faulty power outlet.

- Check your ID of your power supply Or check your wattage HERE.

2. **Examine the Charging Cable and Brick**
   - Look for any physical damage, fraying, or bent pins.
   - Ensure the power cable is securely connected to the charging brick.
3. **LED Status Indicator**
   - **No LED Light:** This might indicate no power or a loose connection. Go to step 2
   - **Flashing LED Light:** This might signify an error or insufficient power delivery.

     Make sure your using the Correct Power ID or and wattage.

Step 2: Clean the Charging Port





1. **Prepare Cleaning Tools**
   - Gather **rubbing alcohol** (preferably isopropyl alcohol, 90% or higher) and **cotton swabs**.
2. **Clean the Surface Charging Port**
   - Dip a cotton swab in rubbing alcohol.
   - Clean the metal pins inside the charging port. (Even if it looks clean) The rubbing alcohol is known to fix connection issues.
3. **Clean the Charger Connector**
   - Repeat the cleaning process for the charger’s connector pins.
   - Ensure no residue is left behind.

Note, You might need to use a thin Layer of **cotton** in order to fit the surface Port.

Step 3: Test the Charger

1. Plug the charger back into the Surface device.
2. Check if the LED light on the charger comes on:
   - If **on and steady**, proceed to charge the device.
   - If **flashing**, check for damage or test with another compatible charger.

Step 4: Check the Device

1. Restart your Surface device by holding the power button for 20 seconds.

   > Note: Turn on PC and then hold down the power button from on, to off, to on again, do not let it go until you see the Windows logo come back up.

2. Connect the charger and observe if the device starts charging.

Step 5: Try Another Charger (if available)

If cleaning does not resolve the issue, test with a different Surface-compatible charger to determine if the problem lies with the charger or the device.

If the LED light is on but the device wont charge.

Your device turns on but it wont charge above 0%

- Make sure your using the original charger, If not, Make sure your using the recommended wattage.
- Please only use a charger that is on Either **Min**, **Max** or **Actual**, from this **list**.
- If your using a device that has 2 batteries such as the Book, See Battery 1 and Battery 2, What is it charging?
- Turn on PC and then hold down the power button from on, to off, to on again, do not let it go until you see the Windows logo come back up.
- Do windows updates. Sometimes **Drivers**, **Firmware** Updates, Resolves Battery issues.

  > Please note. Microsoft is Known to block Firmware updates if battery is under 40%.

- My device wont charge more then 80%, this is normal. Microsoft does this intenchally in order to keep long lasting battery on your device.
- My Battery wont charge more then X (EG 50%). This sounds like your Device Battery is at end of its life time.

- If your device can be charged via USB-C, Charge it for 15 min, and then try using the original charger. or until 40% in order to be able to update firmware.

My battery Jumps from 40% to 10%.

Your battery is dying. Time for a new battery