

# Thunderbolt 5: The Evolution of USB-C and Thunderbolt Technology

- **Faster Connections up to 120Gbps**
- **Multiple Displays up to 144Hz**
- **240W EPR Charging**



## Truly Universal

Thunderbolt 5 cables are backwards compatible with TB3 and TB4, USB4, and older USB-C 5/10Gbps



## Apple M4

Thunderbolt 5 is available on the MacBook Pro M4 (Pro and Max)



## Compatibility Tested

StarTech.com cables are in-house tested for maximum performance and durability with third party certifications to ensure compatibility

Features	Thunderbolt 5	Thunderbolt 4	USB4	USB-C
<b>Bi-Directional Bandwidth</b>	80 Gbps Symmetrical 120 Gbps Asymmetrical	40 Gbps Symmetrical	20 Gbps Required 40 Gbps Optional	None Required 10Gbps Optional
<b>Minimum Video Requirements</b>	 6K 60hz	 4K 60hz	 4K 60hz	N/A
<b>Maximum Video Capabilities</b>	 4K 144hz  8K 60hz	 6K 60hz 8K 30hz	 4K 60hz 8K 30hz	 4K 60hz 8K 30hz
<b>DisplayPort</b>	UHBR20 – 20 Gbps / Lane 80 Gbps Total (120 Gbps with Bandwidth Boost)	HBR3 – 8.1 Gbps / Lane 32.4 Gbps Total	HBR3 – 8.1 Gbps / Lane 32.4 Gbps Total	HBR3 – 8.1 Gbps / Lane 32.4 Gbps Total
<b>Minimum USB Speed Requirement</b>	USB 10 Gbps (up to 20 Gbps)	USB 10 Gbps	USB 10 Gbps	480Mbps
<b>Minimum PCIe Speed Requirement</b>	PCIe Gen 4: 64 Gbps	PCIe Gen 3: 32 Gbps	PCIe: None	PCIe: None
<b>Backwards Compatibility</b>	Thunderbolt 4 Thunderbolt 3 All USB-C Including USB4	Thunderbolt 3 All USB-C Including USB4	Thunderbolt 4* Thunderbolt 3* All USB 10 Gbps and 5 Gbps	Not Applicable
<b>Power Delivery on at Least One Port</b>	Min Required: 140W Max: 240W	Min Required: 100W Max: 140W	No Min Max: 240W	No Min Max: 240W
<b>Thunderbolt Networking</b>	64 Gbps	32 Gbps	-	-
<b>Universal Cables up to 2m in Length</b>	120 Gbps	40 Gbps	40 Gbps	10 Gbps

\*Thunderbolt 3/4 Devices (host requires dual video stream for maximum video performance)