

FIRENEX™-CAT6-DP COMPATIBILITY NOTES

Validated USB-C DP Alt Mode Devices for Professional AV & UC Environments

Overview

To ensure the FireNEX™-CAT6-DP USB-C Extension System enables reliable transmission of USB 3.2 Gen 1 data, 4K DisplayPort video, Ethernet Connectivity and USB Power Delivery over a single CAT6a/7 cable up to 90 meters.

Since video functionality relies on USB-C DisplayPort Alt Mode (DP Alt Mode), following compatibility validation has been performed with devices that natively support DP Alt Mode by Newnex. This ensures professional AV and UC customers can confidently integrate FireNEX™-CAT6-DP into real-world setups.

Test Device Categories & Results

	Product Name	Results
USB-C Switchers	Lightware Taurus UCX Switcher (UCX-4x2-HC30) 	• Verified 4k DP Alt Mode video + USB 3.2 over FireNEX-CAT6-DP • Stable BYOD switching performance
USB-C Room Systems	Cisco Room Bar Pro CS-BARPRO-K9) 	• Verified DP Alt Mode video + USB 3.2 data simultaneously • Reliable operation in conference environments
USB-C Docking Stations	Lenovo ThinkPad USB-C Dock Gen 2 (40AS0090US) 	• Verified 5Gbps USB data with DP Alt Mode video extension • Stable operation with dual USB-A peripherals

USB-C Monitors	Espresso 17 Pro Portable 4K Multi-touch Display  • Verified DP Alt Mode video + USB touch functionality
	Dell S2722QC USB-C 4K Monitor  • Verified DP Alt Mode 4K video + USB downstream ports
USB-C Protocol / DP Testing Equipment	Unigraf UCD-500 DisplayPort 2.1 Generator & Analyzer  • Used for compliance-level DP Alt Mode validation • Verified DP lane switching and signal stability

Key Takeaways

- FireNEX™-CAT6-DP offers support for USB-C DisplayPort Alt Mode (DP Alt Mode) and has been validated with a range of DP Alt Mode devices.
- Verified across major USB-C device categories: switchers, room bars, docks, and monitors
- Ensures reliable performance for USB 3.2 data, 4K video, and USB PD charging in BYOD and Pro AV setups

Future Updates

This compatibility list will expand as additional devices are validated. For requests on specific hardware testing, please [contact](#) Newnex.