

UE3300_W

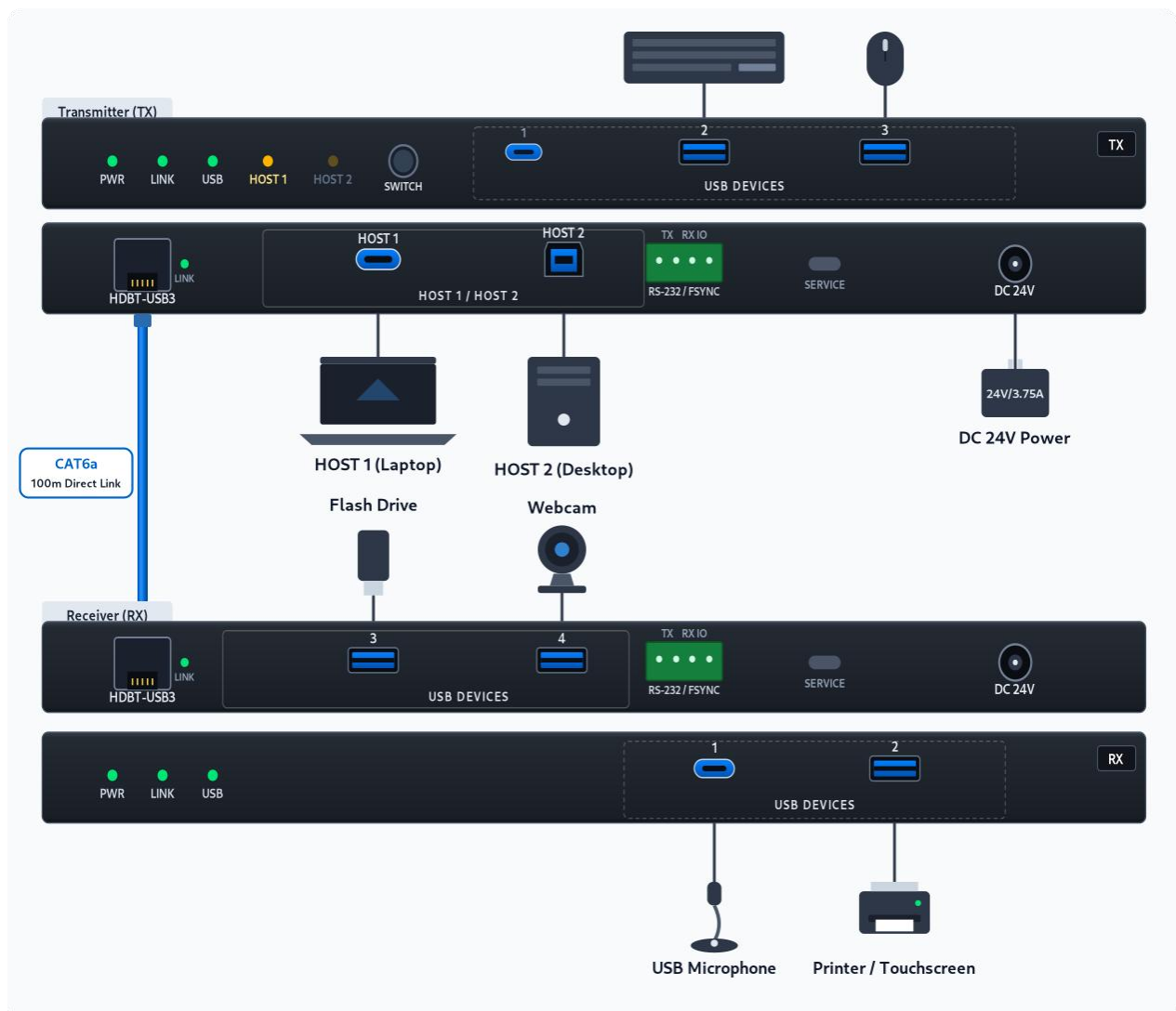
100m 5Gbps Dual-Host USB 3.2 Extender

USB 3.2 Gen 1, 5Gbps, CAT6a 100m, Selectable Dual Host, 7 Device Ports, RS-232 / FSYNC

Product Overview

PANIO UE3300_W is a professional USB 3.2 Gen 1 transmitter/receiver system extending high-speed USB signals up to 100m (328ft) over one direct CAT6a F/FTP cable. With an interface rate up to 5Gbps, it connects high-speed USB peripherals in industrial imaging, conference and control-room applications.

Two selectable host inputs (USB-C and USB-B) share seven USB device ports: three local ports on TX and four remote ports on RX. One host is active at a time. Automatic/manual host switching, RS-232 pass-through and API, FSYNC GPIO and bidirectional 24V PoC support professional integration.



Product Features

- **5Gbps USB 3.2 Gen 1:** Up to 5Gbps theoretical interface rate, backward compatible with USB 2.0 and USB 1.1 devices.
- **100m CAT6a Extension:** One shielded CAT6a F/FTP cable connects TX and RX directly over up to 100m / 328ft.
- **Selectable Dual Hosts:** USB-C HOST 1 and USB-B HOST 2 can stay connected; one host controls devices at a time.
- **Seven USB Device Ports:** TX provides 1 USB-C + 2 USB-A; RX provides 1 USB-C + 3 USB-A downstream ports.
- **Three Switching Methods:** Automatic selection, TX front-panel button and supported RS-232 API commands.
- **RS-232 Pass-Through:** Serial pass-through and API control for professional USB and AV integration.
- **FSYNC GPIO:** TX-to-RX synchronization-signal pass-through supports industrial camera systems.
- **Bidirectional 24V PoC:** Power TX or RX using one DC 24V / 3.75A adapter; the far end receives power.
- **USB-C Service Ports:** Dedicated SERVICE connectors support firmware upgrading and maintenance.
- **Professional Deployment:** Compact metal TX/RX design; plug-and-play USB extension without dedicated drivers.

Specification

Parameter	Specification
Model	UE3300_W
Product Type	100m dual-host USB 3.2 Gen 1 5Gbps multi-port extender (TX + RX)
USB Standard	USB 3.2 Gen 1; USB 2.0 / USB 1.1 backward compatible
Extension Distance	Up to 100m / 328ft over direct CAT6a F/FTP cable
Maximum Data Rate	Up to 5Gbps theoretical interface speed (shared link)
Host Inputs	USB-C HOST 1 + USB-B HOST 2 (select one active host)
USB Device Ports	TX: 1 USB-C + 2 USB-A; RX: 1 USB-C + 3 USB-A
Serial / Sync	RS-232 pass-through & API; FSYNC GPIO, default 0–5V
Host Selection	Automatic / TX panel button / RS-232 API control
Power	DC 24V / 3.75A; bidirectional Power over Cable (PoC)

Interface & System Architecture

Interface	Description
TX Host Inputs	HOST 1: USB-C female; HOST 2: USB-B female (one active)
TX Device Ports	1 × USB-C (5V/1A) + 2 × USB-A (5V/1.5A each)
RX Device Ports	1 × USB-C + 3 × USB-A (5V/1A or 5V/1.5A by port)
Extension Link	HDBT-USB3 RJ45 on TX/RX; dedicated CAT6a F/FTP link
Control / Sync	RS-232 terminal, 4800–115200bps, 8N1; FSYNC GPIO 0–5V
Service / Power	USB-C SERVICE on each unit; DC 24V, bidirectional PoC

USB Distribution & Control

- **Exclusive Host Access:** Both PCs may remain connected, but only the selected computer controls shared USB devices.
- **Distributed Connectivity:** Three local USB ports on TX and four remote USB ports on RX share one 5Gbps interface link.

Mechanical & Connection

Parameter	Specification
Dimensions	TX / RX: 140 × 75 × 23 mm each (L × W × H)
Weight	TX approx. 313g; RX approx. 318g
Maximum Power	TX: 23W; RX: 35W
Operating / Storage	0–40°C / –20–60°C; operating humidity 20–80% RH

Package Contents & Cable Notes

- **TX + RX:** 1 transmitter and 1 receiver (UE3300_W set)
- **Power Adapter:** 1 × DC 24V / 3.75A locking power supply
- **Installation Hardware:** 2 terminal plugs, 4 mounting brackets and 8 screws
- **Documentation / Cabling:** 1 user manual; use a direct shielded CAT6a F/FTP cable

PROFESSIONAL USB EXTENSION APPLICATIONS



INDUSTRIAL VISION

USB cameras + FSYNC



CONFERENCE SPACES

Cameras + microphones



TEST & CONTROL

Labs + industrial PCs

UE3300_W | INTEGRATION FLEXIBILITY

AUTO / MANUAL / RS-232 HOST SELECTION

3 LOCAL + 4 REMOTE USB PORTS | ONE CAT6a LINK

Advanced USB Functions

- **Dual-Host Switching:** Connect two PCs and select one active USB-C or USB-B upstream host.
- **SuperSpeed Extension:** Up to 5Gbps interface rate; real throughput depends on connected equipment.
- **Seven Shared Ports:** Connect three peripherals near TX and four peripherals at remote RX.
- **Serial & GPIO Integration:** Use RS-232 pass-through/API and TX-to-RX FSYNC synchronization.
- **Single-End Power:** Bidirectional 24V PoC simplifies power wiring across the extender link.

Installation Recommendations

- Use a direct, shielded CAT6a F/FTP straight-through cable; do not connect through Ethernet switches.
- Keep the host-side USB cable within the specified 1.5m and verify all peripheral power needs.
- Only one computer can control shared USB devices; select via auto, front panel or RS-232 API.
- Check USB port current limits (5V/1A and 5V/1.5A) for connected cameras and storage devices.
- Maintain ventilation and stable 24V input; never disconnect power during firmware upgrades.

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