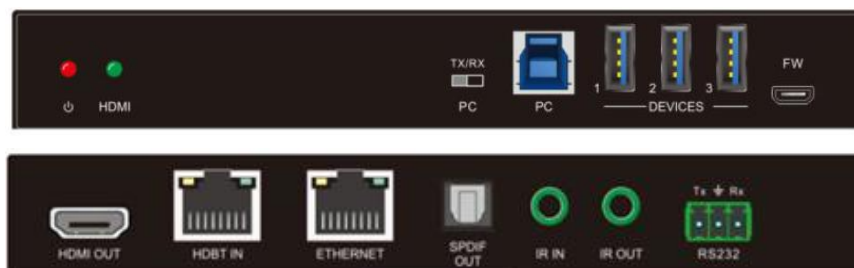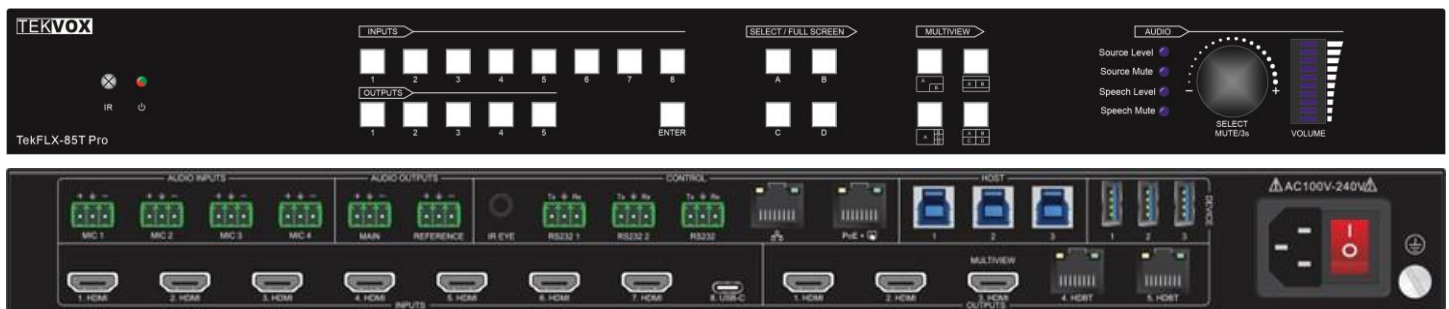# TekFlex-85T Pro

79285 Data Sheet

The TekFlex-85T Pro is an 8x5 presentation matrix switcher designed to simplify the implementation of large distance learning and HyFlex systems. The TekFlex-85T Pro includes dual HDBaseT outputs for multi-display systems, a quad-multiview camera switcher with USB capture, and seven HDMI inputs & 1 USB-C input with 60W charging. Matrix switching ensures that any input can be routed to any output, and the switcher includes twelve flexible multiview configurations for displaying up to four sources at once, as well as an auto-switching mode.

The built-in, multi-host USB 3.0 KVM BYOM from an in-room PC, 2 separate HDMI laptops, and a USB-C laptop. The TekFlex-85T Pro also includes an internal DSP with four microphone inputs (each with selectable phantom power) for mixing microphones, providing speech reinforcement, echo cancellation, and AEC reference for ceiling microphones. Finally, the TekFlex-85T Pro includes a PoE-capable internal network switch[1], which drastically reduces the number of network connections needed for larger systems. The camera multiviewer supports Side-by-Side (SBS) and Picture-in-Picture (PIP) usage of system cameras for conferencing. The internal network switch reduces network drops needed, and supports PoE for powering a connected controller or touchscreen.

With an incredible array of advanced features packed into a 1RU form factor, the TekFlex-85T Pro represents the pinnacle of comprehensive, integrated A/V for distance learning and HyFlex systems.

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[1] **Note**: The PoE network connection only connects to the receivers; it does not connect to the GUI control for the switcher.

Features:

Video

- 7 HDMI inputs and 1 USB-C input with 60W charging
- 3 HDMI outputs, and 2 HDBaseT outputs with 100m (328ft) transmission range
- Route any input to any output with 8x5 matrix switching
- View up to four sources at once with 12 different flexible multiview configurations
- Independent audio input selection during multiview operation
- Supports output resolutions up to 4Kx2K @ 60Hz
- Default video output resolution is 1080p @ 60Hz
- Independent EDID settings for all inputs; default is 1080p @ 60Hz

USB

- Integrated 4-host USB 3.0 KVM for BYOD or PC-based video conferencing
- USB capture routed to Device side of KVM for easy use in video conferences
- Bi-directional USB 3.0 at switcher and receiver (USB over HDBaseT is limited to USB 2.0)
- Automatic bridging of USB hub to a connected USB-C laptop

Audio

- Supports both mic and line level audio inputs
- 4-Microphone DSP with selectable phantom power and built-in AEC

Control

- Controllable via RS232, IR remote, front panel buttons, web UI, or TCP/IP commands
- RS232 and TCP/IP commands use a unique, easy-to-use ASCII protocol
- Supports RS232 and CEC control of displays and source devices with user-defined commands
- Supports custom RS232 commands to be sent to display on device power on/off
- Receiver supports 12 ~ 48V PoC power
- Bridged LAN network uses single network connection for switcher and 3rd-party devices at receiver

TekFlex-85T Pro
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Switcher	
Inputs	7 HDMI (19-pin, Female) 1 USB-C (USB Type-C, Female) 4 MIC In (3-pin Phoenix, balanced mono)
Input Resolution	**HDMI**: Up to 4Kx2K @ 60Hz 4:4:4 **USB-C**: Up to 4Kx2K @ 30Hz 4:4:4
Outputs	3 HDMI (19-pin, Female) 2 HDBaseT (RJ45, Female) 2 Audio Out (3-pin Phoenix, balanced mono)
Output Resolution	**HDMI**: Up to 4Kx2K @ 60Hz 4:4:4 **HDBaseT**: Up to 4Kx2K @ 60Hz 4:2:0
Video Standards	**HDMI**: 2.0 **HDCP**: 2.3
Frequency Response	20Hz ~ 20kHz, ±1dB
Input Impedance	> 10kΩ
Audio Input Formats	PCM 2.0
Control Ports	2 PC (USB 3.0 Type-B, Female) 3 Device (USB 3.0 Type-A, Female) 1 USB-C (Type-C, Female) 1 IR EYE (3.5mm mini jack) 1 RS232 Main (3-pin Phoenix) 2 RS232 Passthrough (3-pin Phoenix, direct connection to HDBaseT lines) 2 TCP/IP (RJ45, Female, 1 with PoE)
Maximum Transmission Distance	328 ft (100m)
Temperature	23 ~ 131°F (-5 ~ 55°C)
Humidity	10 ~ 90%, non-condensing
Power Supply	100 ~ 240 VAC, 50/60Hz
Power Consumption	158.5W (max)
USB-C Charging Power Consumption	60W (max)
Product Dimensions	17.2" (436mm) x 1.7" (44mm) x 14.2" (360mm)
Product Weight	12.1 lbs. (5.49kg)

Receiver	
Inputs	1 HDBaseT (RJ45, Female)
Outputs	1 HDMI (Type-A, Female) 1 Toslink (SPDIF, PCM 2.0)
Input Resolution	Up to 4Kx2K @ 60Hz 4:2:0
Output Resolution	Up to 4Kx2K
Video Standards	**HDMI**: 2.0 **HDCP**: 2.2
Control Ports	1 PC (USB 3.0 Type-B, Female) 3 Device (USB 3.0 Type-A, Female) 2 TCP/IP (RJ45, Female, 1 with PoE) 2 IR (In/Out, 3.5mm mini jack) 1 RS232 (3-pin Phoenix)
Maximum Transmission Distance	328 ft (100m)
Bandwidth	18 Gbps
Temperature	23 ~ 131°F (-5 ~ 55°C)
Humidity	10 ~ 90%
Power Supply	Power over Cable (PoC) 12 ~ 48V range
Power Consumption	10W (max)
Product Dimensions	6.61" (168mm) x 0.91" (23mm) x 5.31" (135mm)
Product Weight	1.1 lbs. (500g)

Specifications are subject to change without notice