

DTP3 CrossPoint 42 Series

4X2 4K/60 SEAMLESS SCALING MATRIX SWITCHERS



DTP3
SYSTEMS

18 Gbps
4K/60 4:4:4

21.6 Gbps
DP Alt Mode

VECTOR 4K
SCALING

10Gbps USB

USB
100W

Advanced AV Switching and Processing for Collaboration

- ▶ Integrates USB-C®, HDMI, and audio sources into presentation systems
- ▶ Advanced Extron Vector™ 4K scaling engine
- ▶ Selectable scaled output rates from 640x480 to 4K/60 with 4:4:4 color sampling
- ▶ DTP3 output supports transmission of 4K/60 video with embedded audio, USB data, control, and power up to 330' (100 m) over a shielded CAT 6A cable
- ▶ Connects USB-C sources that support DisplayPort Alt Mode
- ▶ Provides up to 100 watts of power to the USB-C source
- ▶ USB model supports USB data and video extension:
 - Three USB host connections
 - Four local USB device connections
 - Long distance USB extension

Extron

DTP3 CrossPoint 42 Series

The Extron DTP3 CrossPoint 42 USB is a compact 4x2 matrix switcher that supports USB 10Gbps data at the local USB-C® host port and four-port hub, plus host switching and USB 2 data extension. It incorporates the Extron-exclusive Vector™ 4K scaling engine capable of 4K/60 4:4:4 video resolution, and features USB-C and HDMI inputs, HDMI outputs, plus a DTP3 output for extending video, audio, data, and control signals up to 330 feet (100 meters) over a shielded CAT 6A cable. The DTP3 CrossPoint 42 is available for applications not requiring USB data. Both models provide advanced capabilities such as USB-C charging, audio de-embedding, seamless transition effects, and logo keying. Loaded with these features and more, DTP3 CrossPoint 42 Series matrix switchers deliver fast and reliable AV switching in professional environments.



DTP3
SYSTEMS

Both models feature a twisted pair output to support 4K/60 @ 4:4:4 signal extension up to 330 feet (100 meters) over a shielded CAT 6A cable when paired with DTP3 receivers. They're also compatible with first-generation DTP products and XTP CrossPoint matrix switchers, enabling additional design options within the AV industry's most comprehensive integration platform.

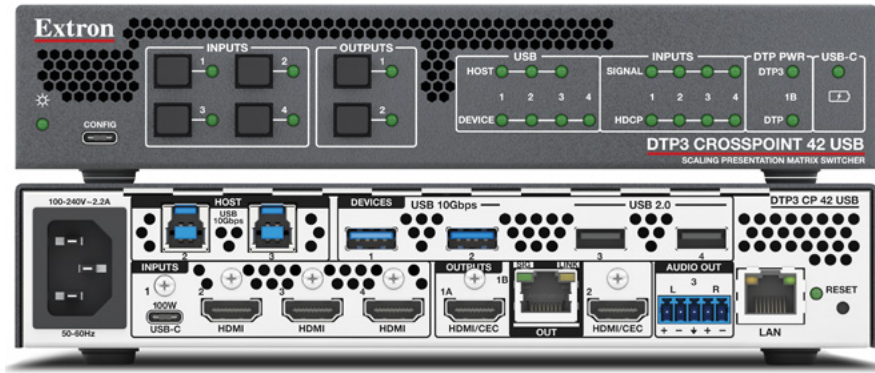
18 Gbps
4K/60 4:4:4

With a maximum data rate of 18 Gbps, the DTP3 CrossPoint 42 and DTP3 CrossPoint 42 USB support computer and video resolutions up to 4K/60 with full 4:4:4 chroma sampling. The Extron-exclusive Vector 4K scaling engine applies precision 30-bit processing and maintains 4:4:4 chroma sampling to ensure pristine image quality at the output.



DTP3 CrossPoint 42 models are built to serve the needs of environments where reliability, ease of use, and superior quality presentations are crucial – these include corporate meeting rooms, lecture rooms in higher education, and government facilities. In addition to pristine video performance, they incorporate logo keying and seamless switching transition effects to enhance the user experience.

COMPLETE USB-C CAPABILITY



The DTP3 CrossPoint 42 USB enables highly functional, feature-rich videoconferencing installations with complete support for USB-C data, video, extension, and power delivery.



EXTENSION

Add a DTP3 R 331 receiver to extend video, audio, USB, and control signals up to 330 feet (100 meters) to connect a 4K/60 display and additional USB 2 High-Speed devices.



POWER DELIVERY

DTP3 CrossPoint 42 USB supports 100 watt power delivery at the USB-C input.



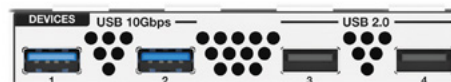
USB 10Gbps

Three USB hosts and two USB devices may be connected locally to support USB 3 data rates up to 10 Gbps.



USB HOST SWITCHING

In-room USB devices such as a camera, mouse, keyboard, microphone, etc. can be switched between three host computers.



4-PORT DEVICE HUB

Supports local connections for two USB 3 and two USB 2 devices.

SEAMLESS SWITCHING AND LOGO KEYING

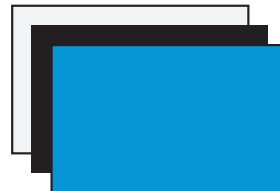
The high-performance video scaling within the DTP3 CrossPoint 42 Series produces uncompromised image quality. Driven by Vector 4K scaling technology, the switcher's video output provides powerful processing capabilities that include selectable seamless switching transition effects and logo keying. These capabilities serve the needs of environments where superior quality presentation is crucial.

Seamless Switching Transitions

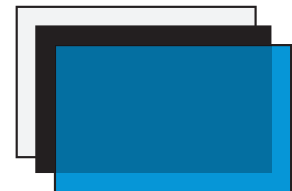
Critical presentations do not tolerate video glitches. To ensure glitch-free, professional quality presentations, several transition effects can be selected when switching between video sources.

Effects include:

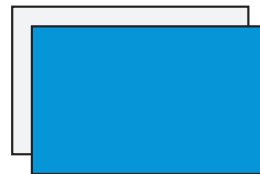
- **Cut through black** – Instantly cut the current input to black, then cut to the newly selected input.
- **Fade through black** – Fade the current input to black, then fade to the new input.
- **Seamless cut** – Freeze the current input video frame, then cut to the newly selected input.
- **Seamless fade** – Freeze the current input video frame, then fade to the new input.



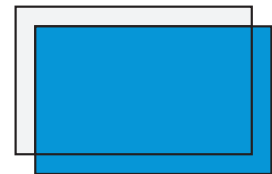
Cut Through Black



Fade Through Black



Seamless Cut

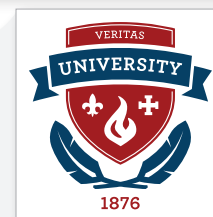
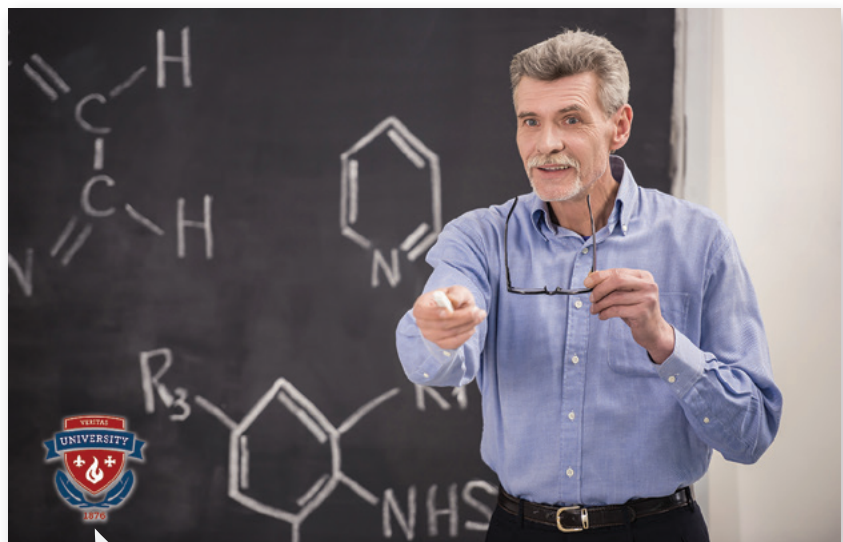


Seamless Fade

Logo Keying

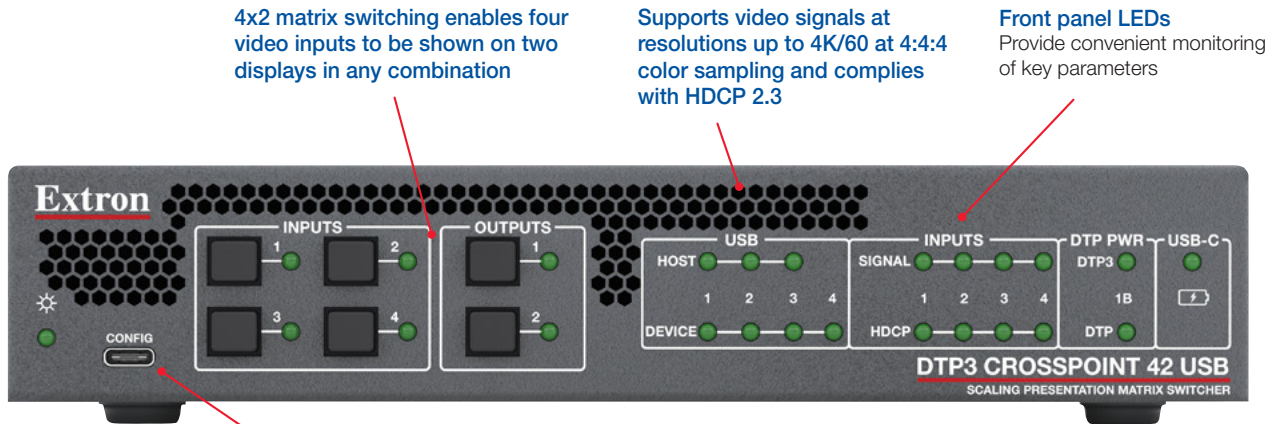
A graphic image such as a company or school logo can be uploaded and inserted on the output video signal to enhance branding and to identify the source of valuable video content. Custom images up to 4K resolution are supported and can be used at any point in the presentation.

- Logos can be placed anywhere on the active video.
- Uploaded logos can be inserted above live video using level keying, RGB color keying, or an alpha channel when supported by the graphic file format.
- Logo images in BMP, JPG, PNG, or TIFF graphic file formats are supported.
- 16 logo presets are available to store the logo filename, position, and key settings for quick recall and switching between multiple logo images.



Images up to 4096x2400 resolution can be uploaded.

OVERVIEW



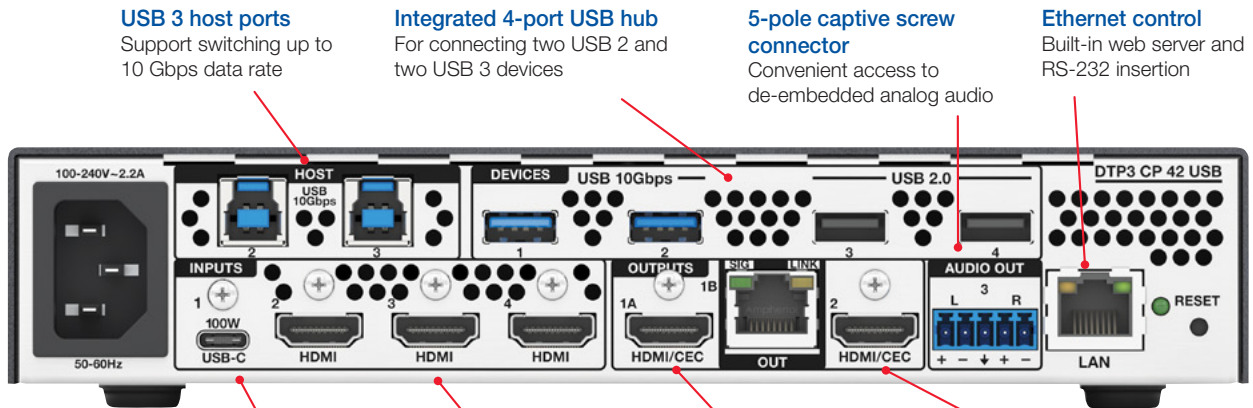
4x2 matrix switching enables four video inputs to be shown on two displays in any combination

Supports video signals at resolutions up to 4K/60 at 4:4:4 color sampling and complies with HDCP 2.3

Front panel LEDs
Provide convenient monitoring of key parameters

DTP3 CrossPoint 42 USB - Front

Front panel USB-C configuration port
Provides convenient access for information and firmware updates



USB 3 host ports
Support switching up to 10 Gbps data rate

Integrated 4-port USB hub
For connecting two USB 2 and two USB 3 devices

5-pole captive screw connector
Convenient access to de-embedded analog audio

Ethernet control
Built-in web server and RS-232 insertion

DTP3 CrossPoint 42 USB - Back

USB-C input
Supports host data connection up to 10 Gbps, DisplayPort alt-mode video, and 100 watt power delivery

Three HDMI inputs
Support HDMI 2.0b specification features including data rates up to 18 Gbps, Deep Color up to 12-bit, and HD lossless audio formats

HDMI output with mirrored DTP3 output
Supports transmission of 18 Gbps video with embedded audio, USB data, control, and power up to 330' (100 m) over a shielded CAT 6A cable

Independently switched HDMI output
Separately driven by Vector 4K scaling technology

Backward Compatible with First-Generation DTP-Enabled Products

Both DTP3 CrossPoint 42 models are compatible with all first-generation DTP-enabled products. The Extron DTP Systems product line is the AV industry's most comprehensive integration platform for small to mid-sized AV systems supporting video resolutions up to 4K over shielded CATx cable. This family includes numerous extender models in a wide variety of form factors and video formats, plus a broad offering of distribution amplifiers, switchers, and matrix switchers with essential AV signal processing and control features.



FEATURES

Integrates USB-C®, HDMI, and audio sources into presentation systems

Selectable scaled output rates from 640x480 to 4K/60 with 4:4:4 color sampling

Maintains optimal output video resolution independent of input resolution.

Advanced Extron Vector™ 4K scaling engine

Specifically designed for critical-quality 4K imagery, with best-in-class image upscaling and downscaling.

Connects USB-C sources that support DisplayPort Alt Mode

Provides power to charge the USB-C source

Supports USB Power Delivery to negotiate power to the USB-C device, providing convenient mobile device charging. DTP3 CrossPoint 42 USB provides 100 watts, while the DTP3 CrossPoint 42 provides 60 watts.

Integrated DTP3 extension supports transmission of video, audio, and control up to 330' (100 m) over a shielded CAT 6A cable

DTP3 CrossPoint 42 USB model adds support for USB data extension.

DTP3 CrossPoint 42 USB Unique Features

Supports USB data with long distance extension

Supports USB 3 data rates up to 10 Gbps.

Three USB host connections

One USB-C and two USB Type-B ports are available to connect hosts at data rates up to USB 10Gbps.

Four local USB device connections

Two USB 3 devices and two USB 2 devices may be connected locally.

USB host switching

USB host switching is completely independent of video switching.

USB 2 extension

Connect a DTP3 R 331 receiver to access remotely located USB peripheral devices over the same cable as video and audio.

Compatible with DTP3 and first-generation DTP endpoints

Supported HDMI 2.0b specification features include data rates up to 18 Gbps, Deep Color up to 12-bit, and HD lossless audio formats

Remote powering of DTP3 and DTP receivers

For simplified installation, the DTP3 output can provide power to select DTP3 enabled and first-generation DTP enabled endpoints over the twisted pair connection.

Compatible with HDBaseT™-enabled displays

The DTP3 output can be configured to send video and embedded audio, plus bidirectional RS-232 signals to HDBaseT-enabled displays.

RS-232 insertion from the Ethernet control port

Compatible with CAT 6A shielded twisted pair cable

Extron XTP DTP 22 shielded twisted pair cable is strongly recommended for optimal performance

HDCP 2.3 compliant

User-selectable HDCP authorization

Allows inputs to appear HDCP compliant or non-HDCP compliant to the connected source, which is beneficial if the source automatically encrypts all content when connected to an HDCP-compliant device. Protected material is not passed in non-HDCP mode.

Selectable seamless switching transitions

Logo image keying and display

SpeedSwitch® Technology delivers virtually instantaneous switching speeds for HDCP-encrypted content

Stereo audio de-embedding

Embedded HDMI two-channel PCM audio can be extracted to the receiver's analog audio output, or multi-channel bitstream formats can be passed to the HDMI output.

Key Minder® continuously verifies HDCP compliance for quick, reliable switching

EDID Minder® automatically manages EDID communication between connected devices

Displays user-supplied images for screen saver, corporate branding, logo insertion, and HDCP notification

Custom, user-loaded images can be displayed as a screen saver after a predefined duration of inactivity at the video input, or whenever the input is disconnected between presentations. User-supplied images can also be displayed for HDCP Visual Confirmation, whenever HDCP-encrypted content is transmitted to a non-HDCP compliant display.

Aspect ratio control

The aspect ratio of a source window can be controlled by selecting a FILL mode, which provides a full screen output, FOLLOW mode, which preserves the aspect ratio.

Motion-adaptive deinterlacing for signals up to 1080i

Advanced deinterlacing for all interlaced signals up to 1080i delivers optimized image quality.

Automatic 3:2 and 2:2 pulldown detection

Advanced film mode processing techniques that help maximize image quality for content sources that originated from film.

Output muting control

Provides the capability to mute one or both video outputs at any time. This allows content to be viewed on a local monitor prior to appearing on the main presentation display.

Image freeze control

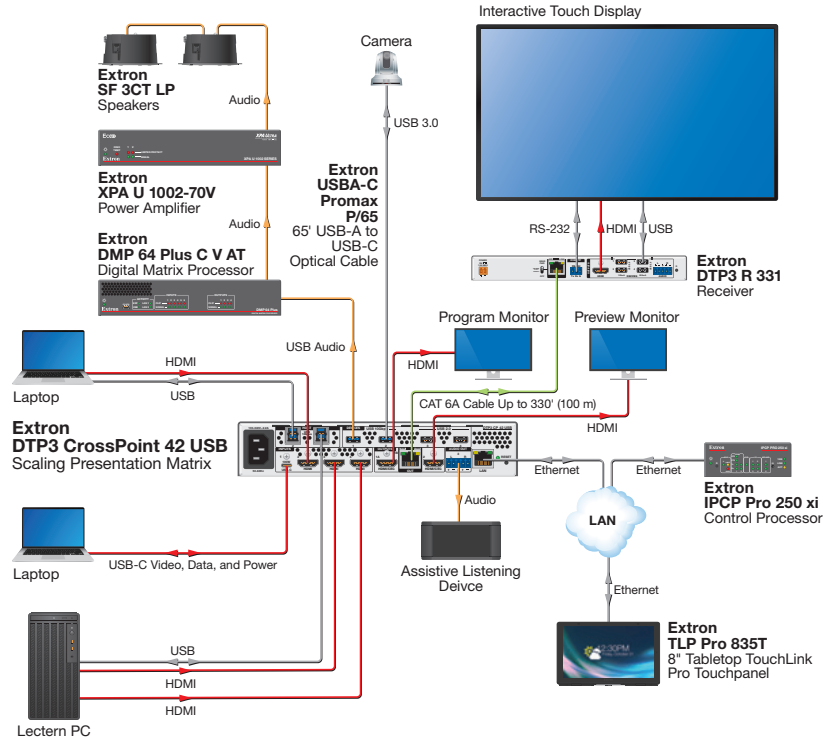
A live image can be frozen using USB, or Ethernet control.

Internal video test patterns and pink noise generator for calibration and setup

Offers several video test patterns and audio pink noise to facilitate proper system setup and calibration of display devices.

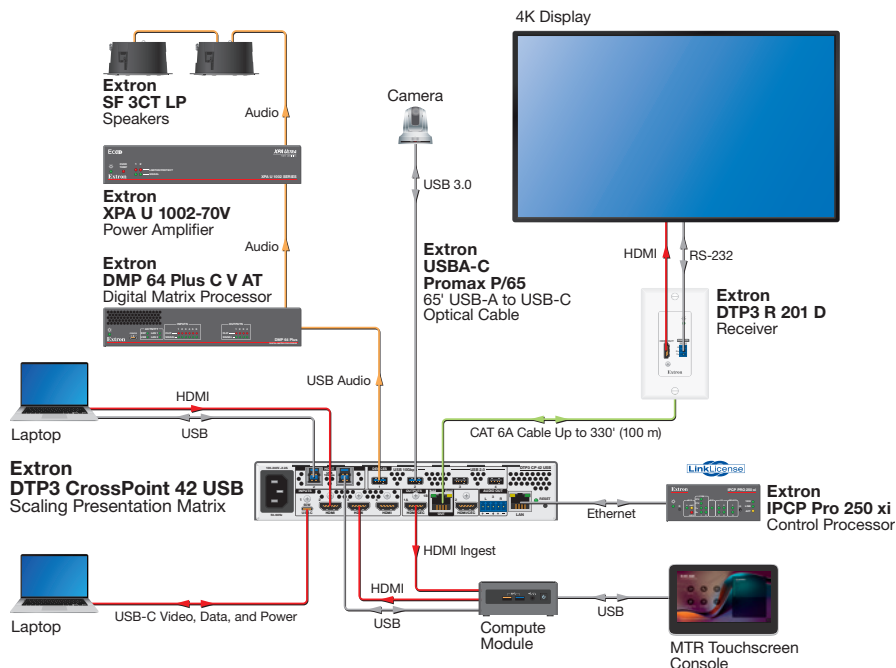
Hyflex Classroom

This classroom accommodates simultaneous in-person and online lectures. The DTP3 CrossPoint 42 USB enables the lectern PC to display its main and extended desktops at the program and preview monitors, while allowing the connected laptops to access the room's installed audio equipment, camera, and interactive display when needed.



Microsoft® Teams Room with BYOM

This meeting room is configured as a certified Teams room by default. Other conferencing applications running on the laptops can have full access to the enhanced audio equipment and high resolution camera installed in the room.



SPECIFICATIONS

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz 4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz		12 bit

Frame rate ¹	24, 25, 30, 50, or 60 fps
Chroma sampling ¹	4:4:4, 4:2:2, or 4:2:0
Color bit depth ¹	8, 10, and 12 bits per color
Signal Type	DVI 1.0, Up to HDMI 2.0b and HDCP 2.3, DisplayPort 1.4
Max. video data rate	18 Gbps (6 Gbps Per Color)
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata to determine video parameters supported by this data rate.	

VIDEO INPUT

Number/signal type	3 HDMI 2.0 inputs 1 USB-C input (DisplayPort 1.2 Alt Mode (2 or 4 lanes) RBR/1.62 Gbps, HBR/2.7 Gbps, HBR2/5.4 Gbps)
--------------------	--

VIDEO OUTPUT

Number/signal type	
Outputs 1A and 1B	1 HDMI 2.0 output 1 DTP3/XTP/HDBT scaled buffered output (configurable)
Output 2	1 HDMI 2.0 output
NOTE: Both selectable HDMI and DTP3/XTP/HDBT outputs are simultaneously active and HDCP Compliant.	

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connector	1 female RJ-45 per unit
Signal transmission distance (using XTP DTP 22 cable)	
4K/UHD @ 60 Hz	Up to 330' (100 m) using XTP DTP 22 cable Using 1 coupler with 3'-16' patch cable Using 2 coupler with two 4' patch cables (each patch cable cannot exceed 4')
Cable requirements	Using two punch downs with 3'-8' patch cables Solid conductor, 22 AWG or better
Cable recommendations	500 MHz bandwidth, STP cable
NOTE: Extron XTP DTP 22 shielded twisted pair cable is strongly recommended for optimal performance.	

AUDIO

Frequency response	20 Hz to 20 kHz, ±0.5 dB
THD + Noise	<0.1%, 20 Hz - 20 kHz nominal level
S/N	>90 dB at maximum balanced output (unweighted)

AUDIO OUTPUT

Connectors	(1) 3.5 mm, 5 pole captive screw 2 female HDMI type A 1 female RJ-45
------------	--

USB-C

USB-C features supported	DisplayPort alt-mode video (2-lane, 4-lane) USB-C power delivery USB data (USB model only)
USB standards	USB 3.2 (Gen 1), USB 2.0, USB 1.1 (USB model only)
USB data rates	Up to USB 10 Gbps (USB model only)
Data transfer types	Bulk, control, interrupt, and isochronous (USB model only)
USB-C power delivery	Up to 60 watts/100 watts power delivery at the following power profiles: (15 watts) 5 VDC @ up to 3 A (27 watts) 9 VDC @ up to 3 A (36 watts) 12 VDC @ up to 3A (45 watts) 15 VDC @ up to 3 A (60 watts) 20 VDC @ up to 3 A (100 watts) 20 VDC @ up to 5 A (USB model only)

USB HOST PORTS – USB MODEL ONLY

Number/signal type	2 USB 3.2, 1 USB-C
Connectors	2 female USB 3.2 type B 1 female USB type C
USB Host support	xHCI (USB 3.2) EHCI (USB 2.0) OHCI/UHCI (USB 1.1)

USB DEVICE PORTS – USB MODEL ONLY

Connectors	2 female USB 3.2 type A 2 female USB 2.0/1.x type A 1 DTP3 twisted pair (for USB 2.0 extension)
USB Max data rates	Up to High speed (480 Mbps), local USB 2.0 device ports and twisted pair extension port Up to USB 10Gbps, local USB 3.2 device ports
Maximum built-in USB hubs	
USB 3.2/2.0 lanes	2
Optional built-in USB hubs	0

GENERAL

Power supply	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption	
Full load	113.1 watts
Power save mode 1	76.6 watts
Remote power capability	Supports DTP3 and DTP remote power (Remote power not available in XTP and HDBaseT modes)
Rack mount	Yes, with included, pre-installed brackets
Enclosure dimensions	1.66" H x 8.69" W x 11.5" D (4.22 cm H x 22 cm W x 29 cm D) (Depth excludes connectors and knobs. Width excludes rack ears.)
Regulatory compliance	UL, CUL, CE, FCC Class A, VCCI, AS/NZS, ICES, RoHS, WEEE
Warranty	3 years parts and labor

NOTE: All Nominal levels are at ±10%

Model	Version Description	Part number
DTP3 CrossPoint 42 USB	4x2 Scaling Matrix Switcher with USB Data	60-1925-02
DTP3 CrossPoint 42	4x2 Scaling Matrix Switcher	60-1925-01

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

Extron

www.extron.com | Follow us on:  