KanexPro®

FLEX Pro Matrix Switcher

The Flex Pro Matrix switcher is the next generation of the most advanced and complete modular matrix media switching and extension solution. It provides comprehensive solutions for high-performance and mission critical signal routing between various local and remote sources and display devices. They feature a wide range of local, 4K twisted pair, and 4K fiber optic input and output cards,

supporting multiple signal types and formats for diverse applications. The Flex Pro Matrix switcher can be expanded from 4x4 up to 16x16, 32x32, 64x64 or 128x128, depending on the chosen chassis. It fully supports HDMI 2.0 bandwidth and HDCP 2.2, allowing for completely integrated 4K systems. It offers seamless switching speed, independent scaling output, video wall capabilities, quad view, audio extraction, and CEC display control.

Key features
- Up to 128 inputs of 4K/UHD HDMI video
- Up to 128 outputs of 4K/UHD HDMI video
- HDMI 2.0, 18Gbps Ultra HD 4K/60Hz 4:4:4 and HDCP 2.2 support
- Redundant Power Supplies
- CAT and Fiber Input/Output cards for remote location devices
- 12G-SDI Input/Output card for easy integration with SDI devices
- DisplayPort
- Dante/AES67 Network Audio support
- PoC (Power Over CAT) to power CAT Tx and Rx from the main chassis
- Selectable independent scaling on all outputs
- Input / Output and System monitoring
- EDID and HDCP management
- Videowall
- Multi view (Quad view)
- CEC display control
- Audio extraction on all inputs
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- 7" front panel touch control
- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Preset save and recall

- Bi-directional, RS-232 and LAN control to endpoints
- TAA compliant

Flex Pro Main frame models

Sku	Title
FLEX-PRO16X16	Flex Matrix Pro 16x16 4K60 Crosspoint Matrix Switcher Frame
FLEX-PRO32X32	Flex Matrix Pro 32x32 4K60 Crosspoint Matrix Switcher Frame
FLEX-PRO64X64	Flex Matrix Pro 64x64 4K60 Crosspoint Matrix Switcher Frame
FLEX-PRO128X128	Flex Matrix Pro 128x128 4K60 Crosspoint Matrix Switcher Frame

FLEX-PRO16X16

Modular Digital Matrix Switchers main chassis from 4x4 to 16x16 with Seamless switching

- Up to 16 inputs of 4K/UHD HDMI video
- Up to 16 outputs of 4K/UHD HDMI video
- HDMI 2.0, 18Gbps Ultra HD 4K/60Hz 4:4:4 and HDCP 2.2 support
- Redundant Power Supplies
- CAT and Fiber Input/Output cards for remote location devices
- 12G-SDI Input/Output card for easy integration with SDI devices
- DisplayPort
- Dante/AES67 Network Audio support
- PoC (Power Over CAT) to power CAT Tx and Rx from the main chassis
- Selectable independent scaling on all outputs
- Input / Output and System monitoring
- EDID and HDCP management
- Videowall
- Multi view (Quad view)
- CEC display control
- Audio extraction on all inputs
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready

- 7" front panel touch control
- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Preset save and recall
- Bi-directional, RS-232 and LAN control to endpoints
- TAA compliant

FLEX-PRO32X32

Modular Digital Matrix Switchers main chassis from 4x4 to 32x32 with Seamless switching

- Up to 32 inputs of 4K/UHD HDMI video
- Up to 32 outputs of 4K/UHD HDMI video
- HDMI 2.0, 18Gbps Ultra HD 4K/60Hz 4:4:4 and HDCP 2.2 support
- Redundant Power Supplies
- CAT and Fiber Input/Output cards for remote location devices
- 12G-SDI Input/Output card for easy integration with SDI devices
- DisplayPort
- Dante/AES67 Network Audio support
- PoC (Power Over CAT) to power CAT Tx and Rx from the main chassis
- Selectable independent scaling on all outputs
- Input / Output and System monitoring
- EDID and HDCP management
- Videowall
- Multi view (Quad view)
- CEC display control
- Audio extraction on all inputs
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- 7" front panel touch control

- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Preset save and recall
- Bi-directional, RS-232 and LAN control to endpoints
- TAA compliant

FLEX-PRO64X64

Modular Digital Matrix Switchers main chassis from 4x4 to 64x64 with Seamless switching

- Up to 64 inputs of 4K/UHD HDMI video
- Up to 64 outputs of 4K/UHD HDMI video
- HDMI 2.0, 18Gbps Ultra HD 4K/60Hz 4:4:4 and HDCP 2.2 support
- Redundant Power Supplies
- CAT and Fiber Input/Output cards for remote location devices
- 12G-SDI Input/Output card for easy integration with SDI devices
- DisplayPort
- Dante/AES67 Network Audio support
- PoC (Power Over CAT) to power CAT Tx and Rx from the main chassis
- Selectable independent scaling on all outputs
- Input / Output and System monitoring
- EDID and HDCP management
- Videowall
- Multi view (Quad view)
- CEC display control
- Audio extraction on all inputs
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- 7" front panel touch control
- Seamless switching speed

- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Preset save and recall
- Bi-directional, RS-232 and LAN control to endpoints
- TAA compliant

FLEX-PRO128X128
Modular Digital Matrix Switchers main chassis from 4x4 to 128x128 with Seamless switching

- Up to 128 inputs of 4K/UHD HDMI video
- Up to 128 outputs of 4K/UHD HDMI video
- HDMI 2.0, 18Gbps Ultra HD 4K/60Hz 4:4:4 and HDCP 2.2 support
- Redundant Power Supplies
- CAT and Fiber Input/Output cards for remote location devices
- 12G-SDI Input/Output card for easy integration with SDI devices
- DisplayPort
- Dante/AES67 Network Audio support
- PoC (Power Over CAT) to power CAT Tx and Rx from the main chassis
- Selectable independent scaling on all outputs
- Input / Output and System monitoring
- EDID and HDCP management
- Videowall
- Multi view (Quad view)
- CEC display control
- Audio extraction on all inputs
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- 7" front panel touch control
- Seamless switching speed
- HDMI to DVI interface format correction

- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Preset save and recall
- Bi-directional, RS-232 and LAN control to endpoints
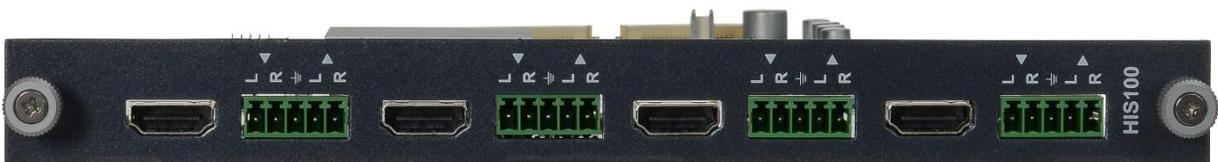- TAA compliant

Main Frame images

< Front view >   < Rear view >   < CAT Rx >

Flex Pro I/O cards models

FLEX-PROHDMI-IN	Flex Matrix Pro HDMI 4x Input Card 4K60
FLEX-PRODP-IN	Flex Matrix Pro DisplayPort 4x Input Card 4K60
FLEX-PROCAT-IN	Flex Matrix Pro CAT 4x Input Card
FLEX-PROFIB-IN	Flex Matrix Pro 4x Fiber Optics Input Card
FLEX-PROSDI-IN	Flex Matrix Pro 4x SDI Input Card
FLEX-PROHDMI-OUT	Flex Matrix Pro 4x HDMI Output Card
FLEX-PRODP-OUT	Flex Matrix Pro DisplayPort 4x Output Card 4K60
FLEX-PROCAT-OUT	Flex Matrix Pro CAT 4x Output Card
FLEX-PROFIB-OUT	Flex Matrix Pro 4x Fiber Optics Output Card
FLEX-PROSDI-OUT	Flex Matrix Pro SDI 12G Output Card

FLEX-PROHDMI-IN
4K/60 HDMI Input Card

- Four HDMI inputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Hot-swappable
- TAA compliant

FLEX-PRODP-IN

4K/60 DisplayPort Input Card

- Four DisplayPort inputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed

- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Hot-swappable
- TAA compliant

FLEX-PROCAT-IN
4K/60 CAT Input Card

- Four CAT inputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Uncompressed 4K60 4:4:4 resolutions up to 330ft (100M) via CAT6A cable
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Hot-swappable
- TAA compliant

FLEX-PROFIB-IN
4K/60 Fiber Optic Input Card

- Four Fiber Optic inputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Compatible with both multimode (984ft/300M) and singlemode (6,562ft/2KM) fiber

- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Hot-swappable
- TAA compliant

FLEX-PROSDI-IN
4K/60 12G-SDI Input Card

- Four 12G-SDI inputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Supports 12G-SDI, 6G-SDI, 3G-SDI, and HD-SDI signals
- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 11.88 Gbps
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- Seamless switching speed
- Hot-swappable
- TAA compliant

FLEX-PROHDMI-OUT
4K/60 HDMI Output Card

- Four HDMI outputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Hot-swappable
- TAA compliant

FLEX-PRODP-OUT

4K/60 DisplayPort Output Card

- Four DisplayPort outputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Hot Plug and Auto Detect
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking

- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Provides +5 VDC, 250mA power on HDMI ports for external peripheral devices
- Hot-swappable
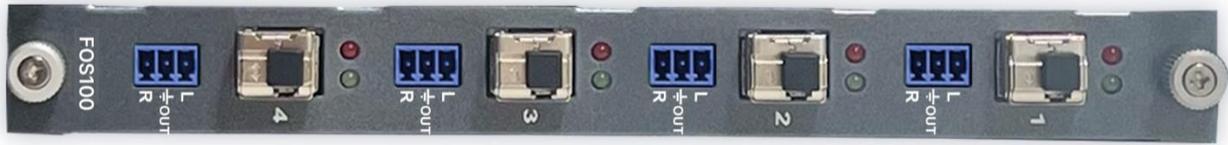- TAA compliant

FLEX-PROCAT-OUT
4K/60 CAT Output Card

- Four CAT outputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Uncompressed 4K60 4:4:4 resolutions up to 330ft (100M) via CAT6A cable
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Hot-swappable
- TAA compliant

FLEX-PROFIB-OUT
4K/60 Fiber Optic Output Card

- Four Fiber Optic outputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Compatible with both multimode (984ft/300M) and singlemode (6,562ft/2KM) fiber
- HDMI 2.0 and HDCP 2.2 compliant
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Compatible with Dante Controller software
- Dante Domain Manager ready
- EDID and HDCP management
- Seamless switching speed
- HDMI to DVI interface format correction
- Hot-swappable
- TAA compliant

FLEX-PROSDI-OUT

4K/60 12G-SDI Output Card

- Four 12G-SDI outputs with Scaling
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Supports 12G-SDI, 6G-SDI, 3G-SDI, and HD-SDI signals
- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 11.88 Gbps
- Dante/AES67 Network Audio support
- Support for HDR – High Dynamic Range video
- Automatic cable compensation
- Automatic signal reclocking
- Compatible with Dante Controller software
- Dante Domain Manager ready

- Seamless switching speed
- Hot-swappable
- TAA compliant

Flex Pro Transmitters and Receivers models

FLEX-PROCAT-TX	Flex Matrix Pro CAT Transmitter
FLEX-PROCATWP-TX	Flex Matrix Pro CAT Wall Plate Transmitter
FLEX-PROCAT-RX	Flex Matrix Pro CAT Receiver
FLEX-PROFIB-TX	Flex Matrix Pro Fiber Transmitter
FLEX-PROFIB-RX	Flex Matrix Pro Fiber Receiver

FLEX-PROCAT-TX
4K HDMI to CAT Transmitter

- Transmits video, audio, and bidirectional RS-232 up to 330ft (100M) over a CAT cable
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Uncompressed 4K60 4:4:4 resolutions up to 330ft (100M) via CAT6A cable
- HDMI 2.0 and HDCP 2.2 compliant
- Support for HDR – High Dynamic Range video
- EDID and HDCP management
- Connects directly to the Flex Pro CAT input card (**FLEX-PROCAT-IN**)
- Remote power capability
- Seamless switching speed
- HDMI to DVI interface format correction

• TAA compliant

FLEX-PROCATWP-TX
4K HDMI to CAT Transmitter – 1 gang Decora-Style Wallplate

• Transmits video, audio, and bidirectional RS-232 up to 330ft (100M) over a CAT cable
• Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
• Uncompressed 4K60 4:4:4 resolutions up to 330ft (100M) via CAT6A cable
• HDMI 2.0 and HDCP 2.2 compliant
• Support for HDR – High Dynamic Range video
• EDID and HDCP management
• Connects directly to the Flex Pro CAT input card (**FLEX-PROCAT-IN**)
• Remote power capability
• Seamless switching speed
• HDMI to DVI interface format correction
• TAA compliant

FLEX-PROCAT-RX

4K CAT to HDMI Receiver

• Receives video with embedded audio and bidirectional RS-232 up to 330ft (100M) over a CAT cable
• Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
• Uncompressed 4K60 4:4:4 resolutions up to 330ft (100M) via CAT6A cable
• HDMI 2.0 and HDCP 2.2 compliant
• Support for HDR – High Dynamic Range video
• EDID and HDCP management
• Connects directly to the Flex Pro CAT output card (**FLEX-PROCAT-OUT**)
• Remote power capability
• Seamless switching speed
• HDMI to DVI interface format correction
• TAA compliant

FLEX-PROFIB-TX
4K HDMI to Fiber Optic Transmitter

- Transmits video, audio, and bidirectional RS-232 up to 6,562ft (2KM) over single fiber optic cable
- Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio
- Compatible with both multimode (984ft/300M) and singlemode (6,562ft/2KM) fiber
- HDMI 2.0 and HDCP 2.2 compliant
- Support for HDR – High Dynamic Range video
- EDID and HDCP management
- Connects directly to the Flex Pro Fiber Optic input card (**FLEX-PROFIB-IN**)
- Seamless switching speed
- HDMI to DVI interface format correction
- TAA compliant

FLEX-PROFIB-RX
4K Fiber Optic to HDMI Receiver

• Receives video with embedded audio and bidirectional RS-232 up to 6,562ft (2KM) over single fiber optic cable

• Supports video resolutions up to 4K/60@4:4:4 and 8ch LPCM High-Res Audio

• Compatible with both multimode (984ft/300M) and singlemode (6,562ft/2KM) fiber

• HDMI 2.0 and HDCP 2.2 compliant

• Support for HDR – High Dynamic Range video

• EDID and HDCP management

• Connects directly to the Flex Pro Fiber Optic output card (**FLEX-PROFIB-OUT**)

• Seamless switching speed

• HDMI to DVI interface format correction

• TAA compliant