

# Selenio™ Network Processor

## Production Multiviewer Personality (SNP-MV)



Imagine Communications' Selenio Network Processor (SNP) can seamlessly ingest various video formats over SDI and/or IP interfaces, process them, and deliver high quality outputs over SDI and/or IP outputs. Inside the SNP there are four processing engines, and each engine can be assigned a different personality at runtime, including a Production Multiviewer personality.

Riding on the widely-deployed SNP platform, the SNP-MV provides scalable multiviewer solutions for SDI and IP facilities worldwide.

The SNP-MV easily operates in COTS/IP ST2110 environments, with the capability to ingest up to 36 pips of ST2110 HD content, creating up to eight UHD canvases; the UHD canvases can be rendered in HDR or SDR. In addition, SNP-MV creates 1080p or 1080i versions of those same canvases optionally downmapped to SDR. The PIP inputs are limited only by the dual (main/protect network) 100G bandwidth. Combining multiple SNP units allows for up to 144 HD PiPs or 32 UHD PiPs on a single UHD canvas.

The SNP-MV excels in managing mixed SDR & HDR/WCG signals or handling a mixture of signal formats. When equipped with the optional HDR feature key, each path through the MV is processed to convert the incoming signal into the target display format – rendering traditional signals into UHD/HDR canvases or rendering HDR signals into a Standard Dynamic Range (SDR) canvas. Even while the SNP-MV creates a consolidated UHD canvas in HDR, it can also create an HD version of that same canvas mapped into SDR for consumption on SDR displays.

With a mix of ST2110, ST2022-6, and SDI inputs, and generating UHD canvases output over SDI and IP simultaneously, SNP-MV provides a very high capability multiviewer system optimized for low-latency production workflows.



ST 2110



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### KEY FEATURES and SPECIFICATIONS

- Input signals including SD, 1080i, 1080p, and UHD, in SDR, SLOG3, HLG, or PQ formats.
- All Canvases are rendered in UHD, with 4x3G SDI or 12GSDI and ST2110 IP output.
- All Canvases are also provided optionally in HD or 1080p over ST2110.
- Each pip can be different sizes in completely flexible layouts with different arrangements of graphical adornments.
- Native integration with Imagine’s Magellan™ Control System, where each IP-input pip is a routing system destination, and the rendered displays are IP routing system sources.
- UMD names can come directly from Magellan through Magellan’s LRC protocol.
- Platform-supported VSFPs allow for flexible UHD output options including optical and HDMI.
- Each personality instance supports up to 9 HD PiPs into one or two UHD canvases.
- Personalities can be stacked providing up to 36 pips per UHD canvas, or run separately producing up to 8 UHD displays within each SNP unit.
- SNP units can be locally aggregated up to 144 HD PiPs in a single UHD canvas with no additional latency.
- Up to 16 audio meters rendered on each pip, horizontally or vertically.
- Captions or subtitles (EIA-608/708, OP42, OP47, or ST2031) rendered on-pip
- SCTE-104 markers indicated on-pip
- EDC metadata rendered on-pip for sports replay applications
- Dakstats scoreboard integration for many common sports
- UMD and Tally support over TSL5 and ImageVideo protocols in addition to SDNO/LRC.
- Visual indicators for network loss and errors, video format and HDR, and more.
- Alarming on unexpected video formats, missing captions/subtitles, and other errors
- With the optional HDR key, each pip supports HDR system conversion to the target display.
- SNP fully supports NMOS environment, each PiP is announced as a routable NMOS destination, and each display is an NMOS source.
- Ultra-Low-Latency design – inputs are received, scaled, and assembled within one frame time in typical configurations, with the display output synchronized to house time.

ORDERING INFORMATION	
SNP-PSK-MV	SNP Platform Software Key – enables MV (and MV-PORT) AP Personalities supporting two Landscape (or one portrait) UHD-output multiviewer. HD downscale output is included (does not require the PSKDOWNHD key). One Key per multiviewer AP. (MAX 4 PER SNP). HDR Conversion requires additional HDR key.
SNP-PSK-HDR	SNP Software Key - Adds HDR Conversion and Adjustment to Sync, Remap, MV, Dual-Conversion, or Quad-Conversion AP. Max 4 per SNP.



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