# StreamCenter™
# Multistream Video Decoder for PixelNet®



## The Massively Expandable Solution for HD Decoding and Display

StreamCenter™ is the most fully featured multistream decoder anywhere. For applications ranging from security monitoring to traffic management to military command and control, and any organization which relies on video streams for situational awareness, Jupiter's StreamCenter is the answer for high performance decoding of multiple streams.

StreamCenter supports both high definition and standard definition IP streams from cameras, encoders, NVRs, and PCs.

Using Jupiter scaling and communication technology, large numbers of streamed sources can be displayed at full frame rate, simultaneously, with digital precision.

## StreamCenter™ Is Powerful and Flexible

Each StreamCenter chassis can decode up to 32 channels of HD video. For projects with large numbers of sources, multiple StreamCenters can be put to work decoding hundreds or even thousands of streams simultaneously.

StreamCenter decodes most major streaming formats, including H.264, MPEG-2, MPEG-4, and MJPEG at resolutions up to 1920x1080.

## Designed for PixelNet®

StreamCenter supports Jupiter Systems' PixelNet Distributed Display Wall System. PixelNet is a high bandwidth non-blocking switched network of input and output nodes, adopting Gigabit Ethernet for use with high resolution, real time video.

PixelNet is all about scalability. A system can be expanded by adding more input nodes or StreamCenters to attach additional sources, or more output nodes to attach additional displays, and connecting them to the PixelNet Switch with common CAT6 cables. PixelNet makes creating complex topologies of inputs, outputs and switches simple, cost effective, and future proof.

All of this power and flexibility is managed by Jupiter's PixelNet Domain Control software, which provides an intuitive, object-oriented, drag-and-drop interface to control and manage multiple inputs, outputs and display walls.
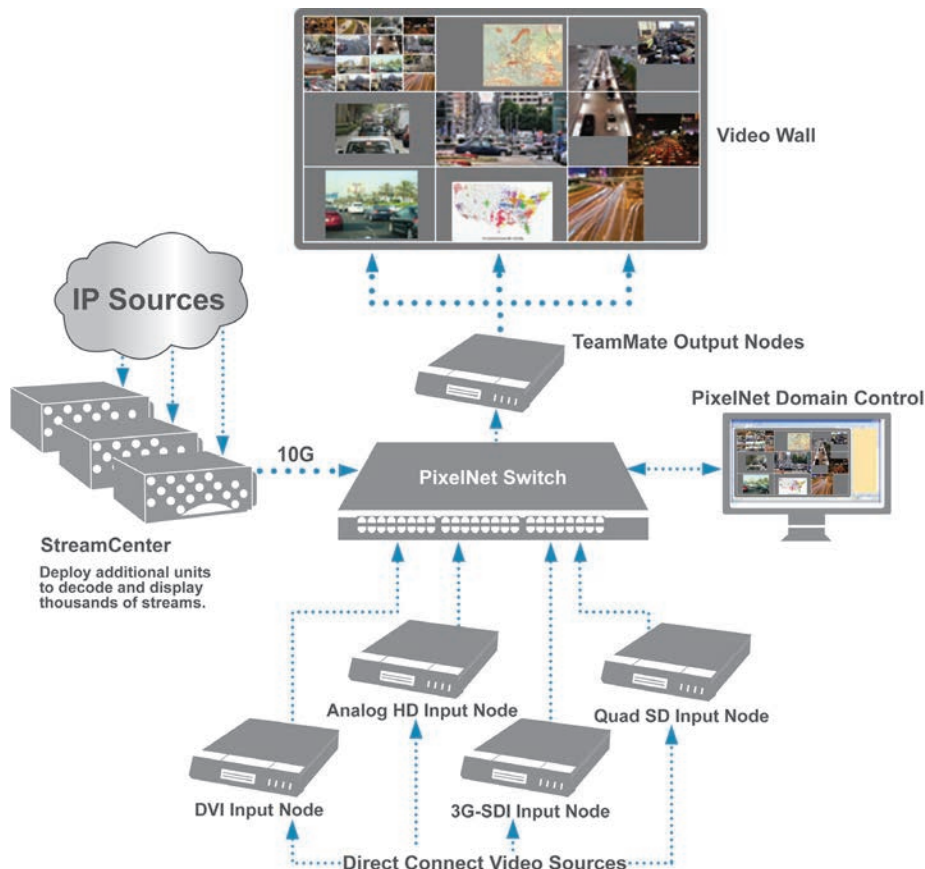
StreamCenter matches PixelNet's scalability with its own. Each StreamCenter chassis connects to switches in the PixelNet domain via 10G ports. Combining PixelNet and StreamCenter allows the creation of very large display walls, or multiple display walls, capable of monitoring thousands of high definition streaming sources.

Jupiter

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| | |
|---|---|
| **System Architecture** | Gen 2 PCI Express chassis with 11 slots, hot-swappable fans, and redundant hot-swappable power supplies |
| | Minimum configuration is 2 Jupiter Quad HD Decoder Cards™ and 1 NIC; maximum is 8 Jupiter Quad HD Deocder Cards and 3 NICs |
| **Quad HD Decoder Card™** | Each card features 4 independent decoders capable of handling multiple formats and protocols, adapting automatically to specific stream types |
| **Network Connectivity** | Single Gigabit Ethernet connection for each Quad HD Decoder Card, 10G SFP+ connection for each NIC |
| **Streaming Video Formats** | H.264: Baseline & Main Profile, MPEG-2 & MPEG-4: Main & High Profile, MJPEG, at resolutions up to 1080p30 |
| **Transport and Protocols** | Program, elementary, and transport streams; RTP, RTCP, RTSP, SAP, TCP, and UDP protocols; Unicast and multicast |

**Dimensions**

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|---|---|
| H x W x D | 7" x 17" x 18" (17.8 cm x 43.2 cm x 45.8 cm) |
| Weight | System Weight: 31 lbs. (14.1 kg), Shipping Weight: 40 lbs. (18.2 kg) |

**Operating Environment**

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|---|---|
| Temperature | Operating: 32°F – 104°F (0°C – 40°C), Non-Operating: 14°F – 150°F (-10°C – 6°C) |
| Humidity | 10-90%, non-condensing |
| Altitude | Up to 10,000 feet (3,048m) |

**Electrical Requirements**

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|---|---|
| Input voltage | 100-240 VAC, auto-ranging power supply |
| Line frequency | 50–60Hz |
| Power consumption | 600 watts, maximum |

**Regulatory**

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|---|---|
| United States | UL 60950 Listed, FCC Class A |
| Canada | cUL CSA C22.2, No. 80950, ICES-003 |
| International | CE Mark, CB Certificate and Mark, IEC 60950, CCC Mark, CISPR 22, VCCI V-3, BSMI CNS 13438 |



- Supports SD and HD IP video inputs
- Decodes up to 32 channels of HD video per chassis
- Install multiple StreamCenters to handle thousands of streams
- Decodes H.264, MPEG-2, MPEG-4, MJPEG
- Supports most popular IP cameras and encoders
- Output resolutions up to 1920x1080
- Configurable decoder cards and NICs
- Hot-swappable fans and redundant hot-swappable power supplies
- Connects directly to PixelNet Switch via 10G SFP+ link
- System monitoring through GUI provides real-time status
- Easy to configure and operate through PixelNet Domain Control GUI
- Robust APIs provide programing flexibility and external control