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sphere™

**BIG SKY TECHNICAL ACHIEVEMENTS:**

**Big Sky is a groundbreaking custom ultra-high-resolution camera system and immersive custom content creation tool that was developed in-house at Sphere Studios to capture stunning cinematic movies for the world's highest resolution screen at Sphere. Every aspect of Big Sky represents a significant advancement on current state-of-the-art cinema camera systems, including the largest image sensor in commercial use capable of capturing incredibly detailed, large-format images.**

- Big Sky's single-lens system boasts the world's sharpest cinematic lenses and achieves the extreme optical requirements necessary to match Sphere's 16K x 16K immersive display plane from edge to edge.

- With underwater and other lenses currently in development, Sphere Studios is giving immersive content creators all the tools necessary to create extraordinary content for Sphere.

- Big Sky's single sensor is a 316-megapixel, 3" x 3" HDR image sensor capable of a 40X resolution increase over 4K cameras.

- Big Sky can capture content up to 120 frames per second at the 18K square format and higher speed frame rates at lower resolutions.

**Capturing media at this scale requires unprecedented processing power and storage solutions.**

- Big Sky's media recorder can absorb full resolution, 60 fps, uncompressed RAW footage at 30 Gigabytes/second, or 120 fps at 50 Gigabytes/second to its custom 32 terabyte media magazines, facilitating an effective process for capturing ultra-high-resolution immersive content.

- The media recorder is capable of handling 600 Gigabits/second of network connectivity, as well as built-in media duplication, to accelerate and simplify on-set and post-production workflows.

- SphereLab, an internally developed image processing software, was created specifically for Big Sky, and utilizes GPU accelerated RAW processing to make the workflow of capturing and delivering content to the Sphere's ultra-high resolution screen practical and efficient.