

EarthCam's New X1 Shoots 4K and Creates 5 Billion Pixel Panoramas

By Jaron Schneider, April 19, 2023



EarthCam, makers of rugged and wireless enclosures for the purposes of outdoor streaming video or timelapse, has announced the X1 system that is capable of capturing 4K video and creating five billion pixel panoramic images.

Massive city-wide gigapixel panoramas are probably what EarthCam's brand is best known for. In 2021, the company shared the largest photo ever taken of New York City that clocked in at a whopping 120 gigapixels, or 120,000 megapixels.

The benefit of EarthCam systems is that they can be placed pretty much anywhere. While they are typically used by construction companies that want to document a build over time or as live-streaming cameras that watch over specific global locations, there is something to be said about how fascinated the average person is with the detail seen in gigapixel photos.

The New X1 isn't going to break any records when it comes to pure resolution — five billion pixels is a scant 5-gigapixels which doesn't come close to EarthCam's record — but it does promise better overall image quality without increasing data rates. Using High Efficiency Video Coding (HEVC), EarthCam says it will be able to deliver 25% to 50% better image quality than previous compression methods using the same bitrate. The X1 also boasts better dynamic range which the company says is ideal for real-world streaming locations that often have to balance bright sunlight against shaded areas.

While 5 gigapixels sounds small, it's still a lot of resolution. EarthCam has published a sample panorama image captured with the X1 that shows it can still capture a ton of detail. The best part about them is that they are generated by EarthCam's software, meaning users don't have to manually stitch together the images necessary to create these massive composites.

Just as previous EarthCam cameras typically offer, the X1 allows for remote manual operation via a joystick, web interface, or mobile app. Additionally, the company says its camera's LiveCam AI tech acts like a full-time camera operator to automatically orient the camera for the best possible exposure and angle of view.

"LiveCam AI uses time, day, month, year, the position of the sun relative to the subject, and even historical data for best conditions including color saturation and depth of field," EarthCam says. "Over 24 values are considered when making a decision on how, when, and where the camera is positioned for the most dramatic imagery – even tracking celestial events like sunrise, sunsets, and moon position."

While the company doesn't explicitly state what camera is inside the X1 unit, since it collaborated with Sony in 2021 and given the promised resolution, it doesn't seem outrageous to think that there is an Alpha 7S III inside the housing. The lens is up for debate, but the X80 unit it announced two years ago used the Sony 25-70mm f/3.5-5.6 OSS.

EarthCam doesn't publish pricing for its units, but interested buyers can reach out to the company directly.