HTC presents the specifications and release date of the Vive Cosmos-- a next-generation PC-powered VR headset promising improved LCD panels, built-in head tracking, integrated sensors and fully-tracked motion controllers.

First announced back at CES 2019, the Vive Cosmos uses two 3.4-inch RGB LCD displays, each with 1440 x 1700 resolution making for 2880 x 1700 combined resolution. The displays are also capable of 90Hz refresh rate and a 110-degree field of view, the same as the original Vive. Interestingly, the headset has flip-out goggles, meaning users can easily take a break from VR without removing the headset. Connectivity comes through DisplayPort 1.2 and USB 3.0, or the addition of a WiGig-based wireless adapter.

The headset features built-in inside-out 6-degrees-of-freedom (6DoF) positional tracking enabled by x6 cameras, a G-sensor and gyroscope. As such it does need external sensors for tracking, making for a simpler setup process. Also included are spatial audio-supporting stereo headphones and microphones. The front panel is modular, meaning users can detach it and replace it with another. For instance, HTC offers an External Tracking Mod allowing to pair the

headset using the Lighthouse base stations making part of the SteamVR ecosystem.

Included with the headset is a pair of knuckle-style controllers. They feature touch sensitivity, x2 application buttons, trigger, joystick, bumper and grip button, and are powered using x2 AA batteries (as opposed to a built-in rechargeable battery). The headset tracks the controllers using the aforementioned inside-out tracking.

The Vive Cosmos hits the market on October 2019.

Go HTC Vive Cosmos