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# Asronics' portable powerhouse

By **Rick Lundstrom** on | Inflight Entertainment



This is a special feature from *PAX Tech's April Aircraft Interiors Expo Hamburg 2020 edition*.



The compact Sierra unit by Astronics is in its third generation

Looking across the airline industry's future demand for portable IFE, Michael Kuehn, President of [Astronics Connectivity Systems and Certification](#), sees a group of potential customers large enough to warrant continued development and refinement its products, but also demanding enough not to settle for a limited solution.

Reliability, scalability and robustness are a few of the words that come up when Kuehn is asked to describe the company's portable IFE solution, called Sierra. But the overall market is filled with potential airline customers that do not want to be locked in to a system that limits their ability to deliver a high-quality experience to their passengers.

"Astronics takes a broader view of the entire passenger experience related to IFEC," Kuehn tells *PAX Tech*. "We don't see any one-size-fits-all product, which is why we have multiple product platforms to suit the needs of various operators and aircraft types."

Astronics' portable IFE product Sierra is in its third generation. The most recent iteration was launched at last year's Aircraft Interiors Expo. It is currently flying with several airline customers and has earned some design accolades along the way. It is on the 2020 [Crystal Cabin Awards](#) shortlist.

The compact look of Sierra was the product of the company's in-house design and development team<sub>1</sub>

that took what it learned from previous generations of the device to make it small and lightweight, taking advantage of the latest technologies.

In addition to the compact size and performance, Astronics has built Sierra for upgrades, whether it is used in small private jets or commercial aircraft. One of the notable features is a moving map display. For the crew, the system enables hands-free operation due to new autonomous through the automated cell modem and ADS-B.

“Its uniquely scalable architecture allows it to function both as a low-cost cabin IFE solution as a single battery-powered system or as multiple units networked together,” said Kuehn. “Sierra accomplishes this by utilizing its dedicated third Wi-Fi radio for load balancing, allowing expanded service on large aircraft to more passengers. “

Content can be uploaded through a removable SSD drive while a 4G cell modem enables wireless content loads. The cell modem has an autonomous feature that detects when the aircraft has landed, allowing content to be updated easily and frequently.

Three generations of product development paid off for Astronics at the end of last year. It was then Sierra developers claimed a [Good Design Awards](#) presented by the Chicago Athenaeum Museum of Architecture and Design. Founded in Chicago in 1950, the program is the oldest and remain the world’s most recognized authority for design excellence worldwide.