

Year in Review: Advantech Wireless Technologies

Much has been written elsewhere about the “year of the pandemic”. While COVID-19 impacted Advantech Wireless Technologies (AWT) in 2020 with near term volatility, the long-term outlook is exceptionally robust.

Despite the COVID-19 pandemic and related economic conditions in 2020, Advantech remained fully operational around the globe. As a supplier to leading global communications companies, governments and their agencies, and the militaries of many NATO countries, our highest priorities were keeping our employees safe, ensuring our ability to serve our customers during this difficult time.

The AWT sales and engineering teams remained available to support customers globally. Some of our most significant product launches occurred this year, with more to follow in 2021.

With so much enthusiasm generated by the promise of LEO, we released our new line of STAN Frequency Converters (Satellite Tracking and Navigation), designed specifically for applications that require two-channel coherent signal processing, such as telemetry, tracking and control (TT&C) and Low Earth Orbit (LEO) Tracking & Navigation. STAN’s ability to provide correction offsets for LEO satellites makes them particularly suitable for navigation and location services.

AWT commenced production of our new Summit II high-power, soft-fail SSPA systems for deployment in early 2021. Built on a new, state-of-the-art control platform, Summit II can reach extremely high levels of RF output power, while providing a level of system availability that rivals anything in the industry. With microwave passive components being a major staple of the AWT product portfolio, high-density, low-loss RF combining structures are the basis for our new line of Ka-band SSPAs.

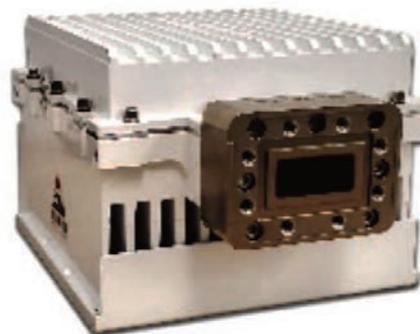
Speaking of microwave passives, AWT worked with the members of the C-band Alliance, including Intelsat, SES, Eutelsat and Telesat to develop a line of 5G interference reject filters that allow 5G operators and satellite operators to cohabitate the C-band portion of the RF spectrum.

For companies that would rather put distance between their carriers and the 5G traffic, we have a complete line of INSAT products that will take you up to the 7 GHz end of the band. AWT’s ever-popular S-band amplifier has been expanded to include L/S-band, with single boxes delivering power levels up to 700W — or integrated into phase-combined systems that can deliver thousands of watts of redundant power. Our newly released Spirit-X BUCs produce 25W and 50W from a small compact package.

The team at Advantech is proud to be a founding member of the new SSPI Canada Chapter. With Canadian expertise currently growing in the fields that cover LEO, MEO and GEO satellites, Space Robotics, Sensors, 5G and Artificial Intelligence (AI), the launch of the new SSPI Chapter is a great opportunity to



The Advantech STAN series of converters.



Advantech's Spirit-X BUC.

strengthen our collaboration within the Canadian Space ecosystem and the SSPI Chapters across the globe. Satellites have become an integral part of life and, therefore, there will always be commercial and

government opportunities. Customers’ increasing need for stable connectivity and throughput requires a level of ubiquity that only satellites can deliver.

Fortunately, there are many new technologies on the horizon that will fulfill the needs of the consumer. As a Company that thrives on technological challenges, Advantech Wireless Technologies has adapted by maintaining strong technological leadership in order to satisfy the requirements of the entire SATCOM Industry.



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companies. He joined Advantech Wireless in 1995 and has held executive positions including in Operations, Manufacturing, Sales, and Engineering. His expertise is centered on Solid State RF technology for Space Applications, and complex integrated networks design.

We have taken Summit to new heights



Kilowatts of
Solid State RF



Highest
Availability



Lowest
MTTR



No Single Point
of Failure



Available in C, X,
Ku and S-Band
Architectures

INTRODUCING SUMMIT II

The **Summit II** high-power, modular, soft-fail redundant SSPA systems are wide bandwidth and ruggedized for outdoor applications. They can be configured with 4, 8 or 16 amplifiers and are field expandable. All of the amplifiers are phase combined into a single system that can generate extremely high levels of RF output power – 10,000 watts or more.

To learn more about the **Summit II** high power systems, visit advantechwireless.com/summit-II/



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