In today’s world, the ability to connect people, technologies and markets must be faster and more reliable than ever before. Ball Aerospace is helping transform SATCOM communications to help the world meet tomorrow’s data demand. Ball’s line of electronically steerable antennas (ESAs) provide reliable, secure and high-speed communications across networks, frequencies and platforms. With our scale, experience and resources, along with our global manufacturing partners, we are bringing the promise of ESA technology to the market today.
Commercial SATCOM Antennas

Ball’s electronically steered phased array antennas are well suited for a full range of global SATCOM services, from in-flight connectivity and high-speed train to maritime, to deliver broadband high-data-rate communication. Our innovative subarray antenna architecture utilizes a standard antenna building block called a subarray. The subarrays are manufactured in volume to minimize cost and are combined to optimize antenna performance for each use case. Ball offers its line of SATCOM antennas covering Ku- and Ka-band spectrums for a range of commercial use cases, including in-flight connectivity (IFC), communication on the move (COTM) and enterprise.

Proven
• Field tested, with our ESAs demonstrated over LEO and GEO satellites

Reliable & Future Proof
• Software-defined antenna enables our architecture to meet the network needs of today and tomorrow
• Antenna terminals are network and modem agnostic to support access to multiple networks
• ESA fast beam update rates easily support LEO satellite tracking

Affordable
• Designed for existing high-volume manufacturing processes
• Use highly-integrated commercial semiconductor devices and circuit boards

Partner with Ball
Delivering the next generation of commercial satellite systems will require strong partnerships across the industry and throughout the supply chain. The Ball commercial engagement model is flexible and allows for a partnership that capitalizes on each organizations’ expertise. With a world-class team of engineers and antenna manufacturing and test facilities, we are ready to discuss how we can work together to develop a high-capability system to meet your connectivity demands.

ESA: Proven & Ready

Ball has assembled and tested multiple ESA terminals, demonstrating the performance and scalability of the subarray design. Terminals have been demonstrated on geostationary orbit (GEO) and low-Earth orbit (LEO) networks, showcasing the flexibility and robust communication capabilities of our terminals to maintain links under highly dynamic maneuvers.

Ball ESA terminals are ready today to meet your SATCOM needs. The company is actively ramping up our production of subarrays. We offer a flexible partnership model that capitalizes on each organizations’ expertise, whether delivering full terminal solutions or just the antenna.