Viasat
+Inmarsat
INTRODUCING
INCOMMAND

SMALL AND AFFORDABLE REAL-TIME COMMANDING FOR LEO CUBESATS

THE PROBLEM

More than 4,000 satellites launched before 2027 will require real-time tasking for applications such as Earth Observation, Telecommunications, Science and Exploration and ISR. A prime example for the U.S. Air Force are small ISR satellites that take high-resolution images in targeted areas for weather forecasting, environmental observations or critical missions of national security. These missions require real-time commanding of all the non-GSO spacecrafts as short response times are vital. However, today's cubesat's ground stations are not deployed all along the satellites orbital path. Hence the communications links are not in-real time, and latency can add hours to delivering the mission. In addition, current satellite solutions are expensive, heavy, big and power-hungry, and therefore cannot be accommodated into small cubesats.

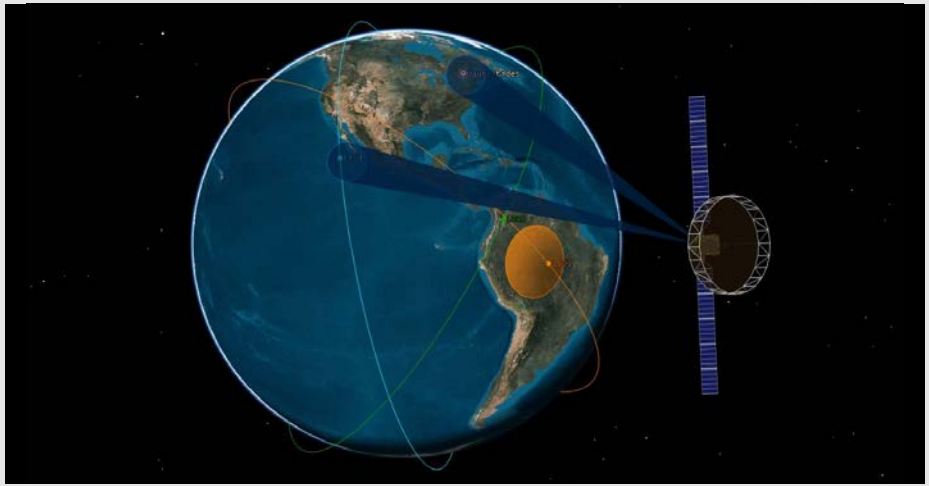
OUR SOLUTION

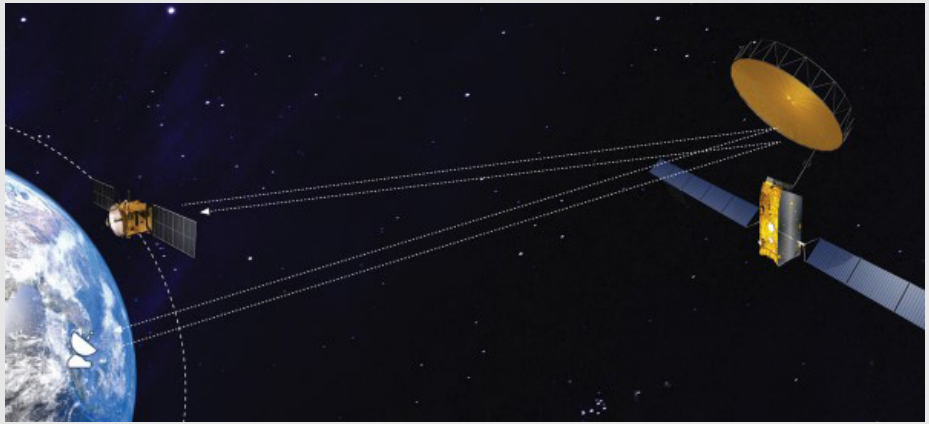
InCommand solution provides a truly global low-cost and low-SWaP (Size, Weight and Power) transceiver for Low Earth Orbit (LEO) satellites that is capable of receiving real-time commands from L-band geostationary (GEO) satellites. Our resilient solution removes the dependency on ground infrastructure and provides a highly efficient, cost-effective and time-critical solution for any LEO satellite.

MAJOR VALUE

- Continuous, positive control of satellites
- Truly global, redundant and reliable coverage
- Low-cost, two-way, on-demand communications links for LEO
- Scalable to thousands of satellites
- Reduced backhaul infrastructure costs
- Data rates for commanding of 30-200 kbps; and up to 15 kbps for telemetry
- Rapid deployment using existing space and ground infrastructure

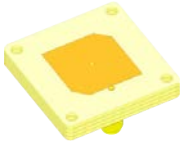
INCOMMAND SOLUTION HOSTED ON-BOARD LEO SATELLITES WILL RECEIVE AND TRANSMIT REAL-TIME COMMANDS ANYWHERE ON THE GLOBE.





KEY FEATURES

- Multicast and broadcast capability
- Built-on flight-proven software defined radio technology
- Fully asynchronous for real-time access with low-power consumption
- Single dual-band, less than 3 inches square antenna



TO LEARN MORE

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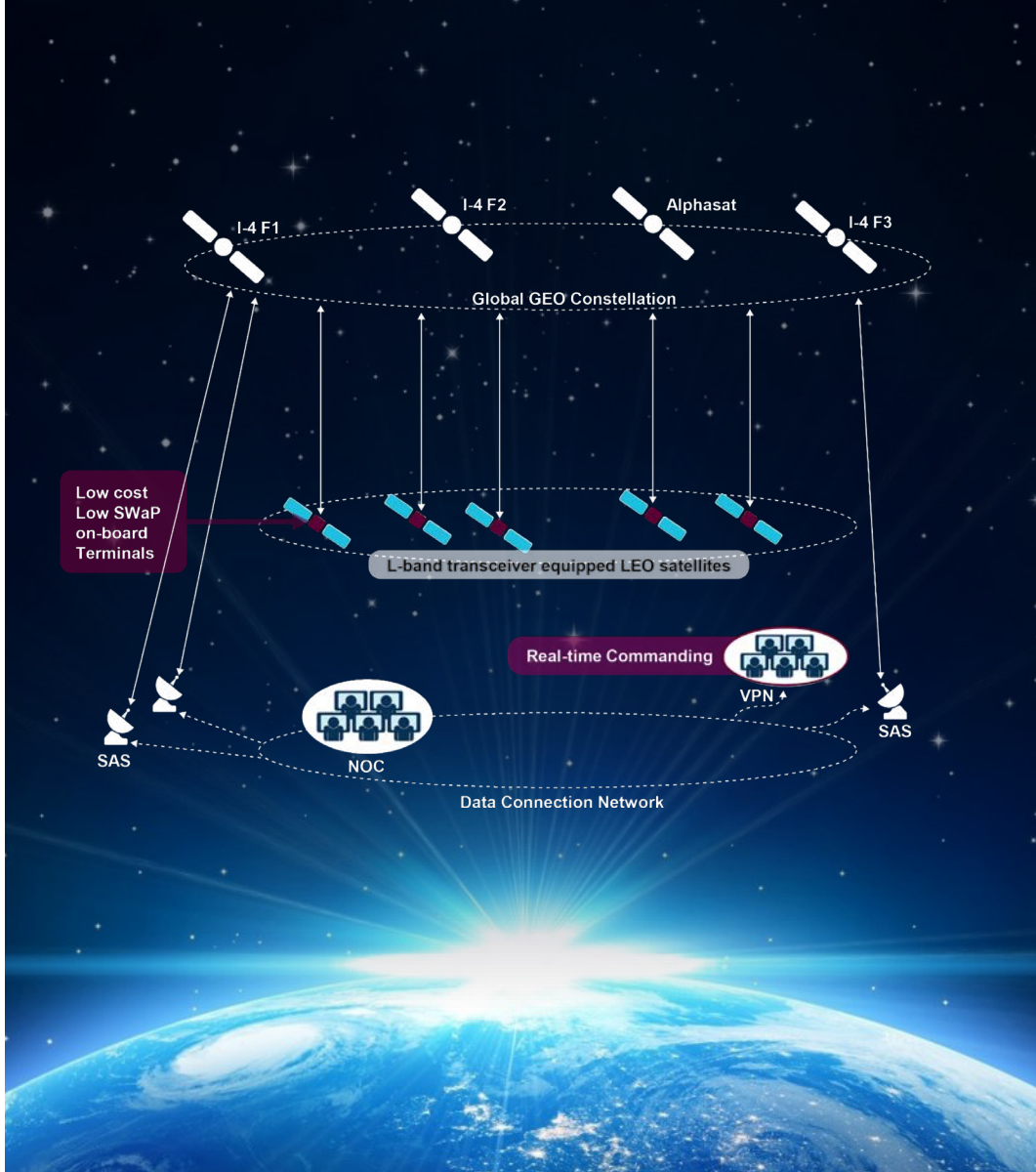

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