IIncrease the connection with your LEO satellites to near continuous

TRADITIONAL

Without Addvalue's Inter-Satellite Data Relay System (IDRS), communication with your satellite is enabled about 4% of the orbit.

WITH IDRS

With Addvalue's Inter-Satellite Data Relay System (IDRS), communication with your satellite is enabled up to 99% of the orbit.

LESS COMPLEXITY

MORE MISSION CONTROL

Addvalue is a satellite communications company that is dedicated to partnering with you to develop boundless connectivity solutions on the horizon and beyond.

Whatever the market or application, Addvalue's wide range of products, extensive engineering expertise and integration services are sure to offer the right technology to drive enhanced connectivity.

IDRSSPACE.COM

IDRS.

POWERED BY Viasat

DESIGNED & DELIVERED BY ADDVALUE

ALWAYS CONNECTED

Always in control

IDRSSPACE.COM

LESS COMPLEXITY MORE MISSION CONTROL

IDRS offers real time connectivity using the L-BAND network. With mature and reliable ground and space infrastructure, IDRS allows LEO satellites to remain connected 24/7. For businesses and critical operations, this means you get vital information in real time from a secure, reliable and space proven network, to wherever you are in the world.

This allows LEO operators to communicate on-demand with their LEO constellation by relay within the Inmarsat network. With IDRS solutions, LEO satellite operations will no longer be throttled by ground station scheduling. IDRS technology greatly improves the efficiency of LEO satellite fleet ops.

ALWAYS CONNECTED
ALWAYS IN CONTROL

The IDRS operational difference

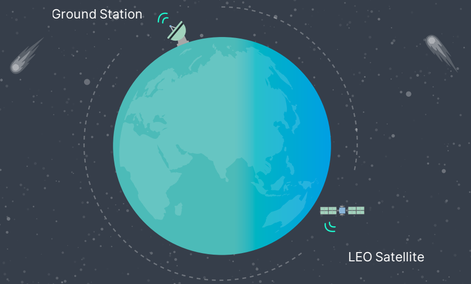
- "Always On" connectivity
- Ability to initiate connection from space and as well as from the ground
- On-demand 24/7 communications link provides scalable, operational efficiencies for single satellites or constellations
- Edge processing enables on board compression and data analysis
- Enables real-time delivery of processed and compressed data analytics to ground
- Enables satellites to immediately share intelligence and receive new tasking instructions in near real-time, reducing response times from days to hours or minutes
- The operator selects a "data plan" that is shared by the whole constellation
- End-to-end IP links, compatible with user defined encryption, keeps data and communications secure
- "On-demand" service means the operator is always connected but only billed for the data volumes that are sent and received
- The IDRS terminal can share a Tip and Cue link with an IDRS terminal onboard another LEO satellite. This allows cost effective lower resolution satellites to tip higher cost, higher resolution satellites to take a closer look at a target area
- Efficient pricing (significant price reduction) for large constellations and long service durations
- Allows a constellation operator to closely cooperate with other operators who carry IDRS on board, creating super constellations

The IDRS terminal

- Small and lightweight, compatible with nano and larger LEO satellites
- Based on proven space flight heritage, and in-orbit tested with the Viasat L-Band network
- Functions as a full-duplex IP modern/router at an average of >200 kbps, creating secure and always-on IP based connectivity

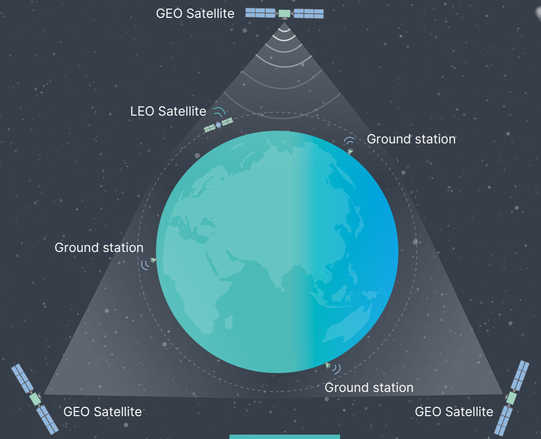
Addvalue's IDRS solution brings the capabilities of the Viasat L-band system to space by integrating the IDRS terminal into a LEO spacecraft. While in orbit, the IDRS link to the Viasat L-band ground network is maintained via the global constellation of the GEO satellites.

Building upon the constellation and it's L-band ground infrastructure, both global coverage and global connectivity are being achieved.



TRADITIONAL

Leveraging the L-band service portfolio, this provides a range of always-on, on-demand, real-time connectivity, thus resolving the need to wait for the LEO satellite to pass above a ground station.



WITH IDRS

IDRS™ Terminal Specifications

THE i100 TRANSCEIVER

DIMENSIONS	125 × 96 × 70mm³
RELIABILITY	Up to 5 years in orbit
WEIGHT	1 Kg
DATA RATE	Up to 200 kbps
ANTENNA OPTIONS	Directional antenna and Hemispherical Switched antenna options available
POWER CONSUMPTION	RX only, 8 watts RX & TX: 9-10 watts, typical, dependant upon traffic and antenna configuration
SATELLITE INTERFACES	RS-422, Ethernet
IP CONNECTIVITY	Ethernet interface supports the full range of satellite application protocols: FTP, SSH, Telnet, HTTP, etc
TEMPERATURE RANGE	-25 to +55°C, operational -40 to +80°C, storage

CONNECT.
COMMAND.
CONTROL.