NearSpace Launch, Inc®
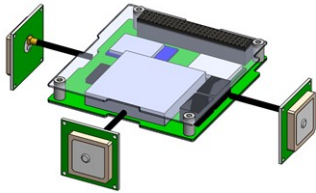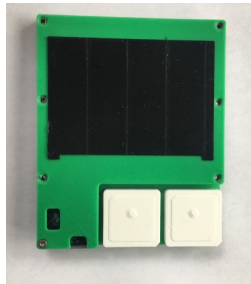Technology. Service. Education

NSL Blackbox System

Custom Solutions. Quick Delivery. Consistent Success.

"PC-104" Black Box
9.6cm x 9.0cm x 2.1cm

"Patch" Black Box
100mm x 81.5mm x 6.5mm

"Standard" Black Box
10cm x 7.2cm x 3.8cm

The NearSpace Launch, Inc (NSL) Black Box units are *full independent and redundant satellite mini-Box* that provides consistent flight diagnostics to ensure complete health and safety during the course of a satellite mission. This system utilizes our flight proven EyeStar™ communication systems, in combination with a variety of flight proven support systems and sensors to provide autonomous diagnosis of satellite flight conditions. These units can assist with anything from Space debris diagnostics, to health and safety, all with a 24/ 7 flow of data and liability claims. The NSL Black Box system is designed for any satellite size, and encompasses options including a camera, as well as the STX3 chip for a wide array of problem analysis and diagnostics capabilities.

The NSL Black–Box system is designed to last for the entire duration of your satellites orbit and beyond. Our systems comes in three sizes to ensure a proper system for your mission needs.
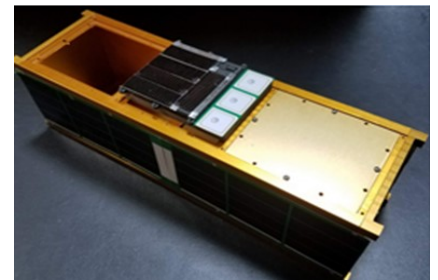
Technical Specs:

⇒ 24/7 Coverage

⇒ ARM processor and Firmware

⇒ Simplex Rate: 600Kb/ day@ 70%

⇒ 7 Bytes/ Second

⇒ Must be spinning < 3 RPM

⇒ Battery and solar array options

⇒ GPS included in "Standard" option and optional connector for "Patch" and "PC-104"

⇒ Horizon Grid or Sensors

Key product highlights:

⇒ Features Flight Proven Technology

⇒ Variety of size options: Patch, PC-104 Stack, and Standard

⇒ Encompasses end to end transmission system, no need for a ground station

⇒ Autonomous system, independent of main bus

⇒ Low power, affordable data transfer

⇒ RF EMI certification

⇒ Long-Lifespan

⇒ FCC compliant

Options:

⇒ NSL provides FCC Licensing Assistance via consultant

⇒ External or internal mounting

"Patch" Black Box on a 3U CubeSat

NearSpace Launch Inc. | nearspacelaunch.com | 765.998.8942

Data & Ground Station Services

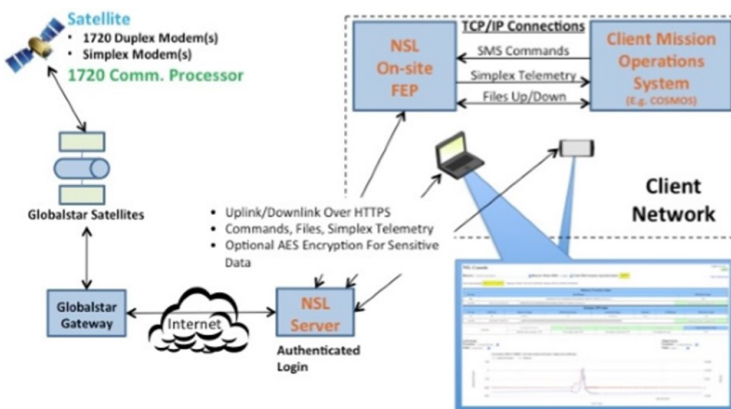## Custom Solutions. Quick Delivery. Consistent Success.

Globalstar

NearSpace Launch data and ground station services provide a unique alternative to traditional ground station transmissions by providing 24/7 global ground connectivity.

NSL provides this service by connecting to the Globalstar ground station network and utilizing its 30 satellite constellation to bring data from your satellite to you in near real time. This enables quicker detection of problems, predictable transmission patterns, and more consistent data to observe trends, patterns, and location relative to your missions objectives.

The NSL data system is also unique because it does not require a full ground station to collect or access data. Simply go online and go to the NSL data console for instant access to your data at any time of day.

Current customers of this product include AFRL, NASA, NanoRacks, and Virginia Space Consortium, as well as numerous universities including Taylor University, CU Boulder, Boston University, and several others.

Thanks largely to the fact that our system does not require a traditional ground station, our ground station and data services are available to you at a monthly subscription charge that is a fraction of the cost of the competition, while still providing 24/7, reliable data.

Key Product details:

⇒ Fault tolerant redundant data servers

⇒ 24/ 7 global connectivity without roaming charges

⇒ Continuous access to your satellite

⇒ Laptop and mobile friendly console

⇒ Required with purchase of EyeStar™ Simplex or Duplex unit

Options:

⇒ Variety of data packages available

⇒ Simplex or Duplex transmission options

⇒ Collection, research, analysis options available

⇒ Encryption services available

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