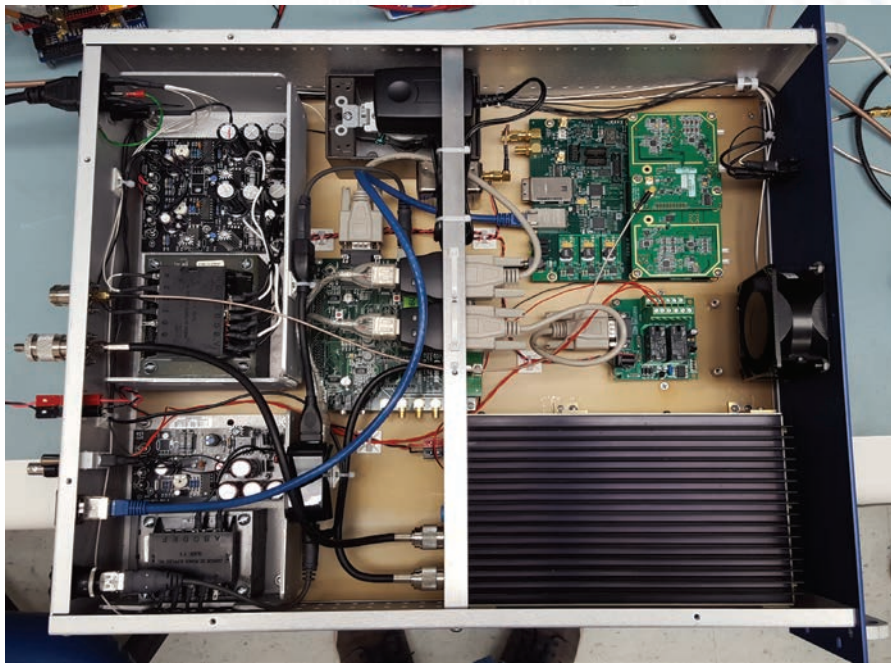


NSGT

SOFTWARE-DEFINED NANOSATELLITE GROUND TRANSCEIVER



An internal view of the deployment box and its interconnections

Ground station operators need an affordable, configurable solution to communicate with small satellite radios.

SDL's software-defined nanosatellite ground transceiver is low cost and highly configurable. It is compatible with a broad range of industry radios, including SDL's Cadet U and Cadet PLUS.

The nanosatellite ground transceiver can also be used for benchtop testing during spacecraft integration.

FEATURES

- UHF and S-band compatible
- Reconfigurable modulations such as BPSK, FSK, OPSK, OQPSK, etc.
- Reconfigurable data rates
- Automatic narrow band interference suppression



The front plate of the benchtop testing ground station box.

BENCHTOP TESTING

The benchtop nanosatellite ground station box is designed to maximize configuration options, while minimizing the number of external connections needed. This conserves valuable space on the test bench and reduces the possibility of human error or damage to sensitive hardware. Both the uplink and downlink chain can be individually attenuated to different power levels for both hardware protection and simulation of range losses. Each individual hardware component is powered through a single power cable, eliminating the need for additional external cables.

DEPLOYMENT DESIGN

The deployment nanosatellite ground station is integrated in a single rack enclosure to minimize overall size for portability. It is currently deployed at Wallops Flight Facility UHF Ground Station site.

