AVIONICS

CABLE AND WIRE HARNESSES





Sidus has a ~ 10,000 square-foot reconfigurable avionics lab that produces a wide range of space system flight and ground cables, medical and mission critical wire harnesses, military harness assemblies, electronic chassis, and electro-mechanical assemblies.

With extensive experience assembling electronics, our lead trainer is a NASA 8739.4 Level B certified instructor allowing for expedited training and workforce certification. Our technicians are certified to NASA-STD-8739.4, IPC-620, and IPC-J-STD-001 with the Space Addendum. Our accredited technicians also adhere to NASA work standards required to perform all necessary functions for flight-rated cables.



LAB CAPABILITIES

- » Cable Assemblies
- » Connectors
- Contacts and Terminals
- » Mechanical
- » Potting and Molding
- » Terminations
- Testing

DISCIPLINES

- Aerospace
- Commercial
- » Defense
- » Satellite

CERTIFICATIONS

- AS9100D
- » AWS Welding
- » ISO9001:2015
- » J-STD-001-IPC
- NAS STD 8739.4

WHY PARTNER WITH SIDUS SPACE

We have over a decade of proven space flight heritage and space qualification experience in design, development, test and certification of space hardware, software, and manufacturing. We are experienced in mechanical and electrical flight hardware for satellites, the ISS, and other space assets.











CABLE ASSEMBLIES

- » FO (Data)
- » HO (Power)
- » ML (Data)

CONNECTORS

- » Coax (TNC, SMA, HN, and Tri-Axial)
- » Commercial Off-The-Shelf (COTS) Hardware
- » Commercial
- » General Purpose
- » High Density
- » Miniature
- » Power
- » Rectangular

CONTACTS AND TERMINALS

» From 26 AWG up to 4/0 AWG

MECHANICAL

» -500 to +2000 lbs for pull test requirements to certify and verify good crimps and splices (performed on test samples)



POTTING AND MOLDING

- » Consists of OSHA-approved laboratory vent hoods
- » Multiple ovens for elevated temperature chemical cures
- » De-aeration for performing certified processes such as bonding, potting, etc.

TESTING

- » DC Hipot (manual to 3,000 VDC and automatic to 1500 VDC)
- » Alternating Current (AC) dielectric (manual to 3,000 VAC)
- » Continuity (Manual and Automatic)
- » Automated testing to minimize the time for end-to-end connection testing.

TERMINATIONS

- » Butt and Parallel Splices (up to 4/0 AWG)
- » Flag Terminals (up to 4/0 AWG)
- » Soldering (IPC-610, IPC-620, J-STD-001 (Space Addendum), and MIL-HDBK-454)
- » Stripping (Thermal and Mechanical)

