



Reliable | Proven | Certification-ready

# Aircraft Automation Solutions

With S-PLANE's Aircraft Automation Solutions, airframes designed for manned or for unmanned operation are fully automated to become Unmanned or Optionally Piloted Systems (UAS or OPS). This includes mini-UAS, Tactical MALE and HALE UAS, and extends to the conversion of general aviation manned aircraft into UAS and OPS. The primary building blocks of these solutions are S-PLANE's state of the art, reliable and redundant NX-SERIES, X-SERIES and X-KIT certification-ready products, combined with system engineering, integration, flight testing and certification support.



# Aircraft Automation

Core On-board Equipment

## NX-SERIES



## X-SERIES



## X-CUBE



### Product Applications:

- NX-SERIES: mini and tactical UAS
- X-SERIES: tactical and MALE UAS
- X-KIT: complete MALE UAS and OPS Automation
- Rotary- and fixed-wing aircraft

### Scalability:

- Shared software architectures between products
- Shared hardware architectures between products
- Tightly integrated and card-based options
- Scalable redundancy up to x3
- Scalable enclosures

### Functionality:

- Full envelope flight automation
- Mission management
- Protected fly-by-wire remote piloting
- Built-in payload, LOSCom and SatCom management and storage
- Automation and remote control of general aircraft functions

### Characteristics:

- Modern and Versatile
- Proven and Safe
- Seamless redundancy
- Standards-based Design (RTCA/ARP/STANAG/etc.)
- Certification-ready
- Highly customisable

### Interoperability:

- STANAG 4586
- Shared S-PLANE Ground Control Solutions
- Shared S-PLANE Communication Solutions
- Shared S-PLANE Simulation Solutions

### End-to-end Support:

- System Engineering
- Customisation
- Integration
- Flight Testing
- Certification
- Maintenance and Repair

## X-KIT

S-PLANE's X-KIT is a comprehensive solution that offers a means to rapidly convert a manned aircraft into an Optionally Piloted System (OPS) or Unmanned Aerial System (UAS). Built on proven and rugged X-SERIES technology and S-PLANE's Communication and Ground Control Solutions, the flexible X-KIT can be readily applied to almost any fixed- and rotary-wing aircraft. Seamless integration with third party payloads brings high-end, versatile autonomous systems of the future to today.



## X-SERIES

S-PLANE's X-SERIES of automation subsystems represents the state-of-the-art in avionics and automation solutions for OPS and UAS. The X-SERIES was specifically designed from the ground up to be modular, scalable and rugged to robustly accommodate the wide variety of form, fit and function requirements faced by aircraft subsystems. The result is a series of subsystems able to precisely meet the functional, physical and safety requirements of almost any UAS, while providing the latest in technology, standards, reliability and maintainability.



## NX-SERIES

S-PLANE's NX-SERIES is the Nano extension of this product family catering for small-form-factor, SWaP sensitive systems. It comes with an optional internal Power Distribution Unit (PDU) for further SWaP optimisation. Reliability, functionality, flexibility and certifiability are all key design elements carried across to the NX-SERIES architecture. The result is a set of subsystems able to accommodate the strict physical and electrical requirements of SWaP sensitive systems, while continuing to provide the latest in technology and functionality, responsibly and reliably.



### Contact Details

9B Cyclonite Road, The Interchange, Somerset West, South Africa, 7130  
 Phone: +27 21 851 9282, Fax: +27 86 298 4587  
 Email: [info@s-plane.com](mailto:info@s-plane.com), Web: [www.s-plane.com](http://www.s-plane.com)