THE REVOLUTION IS HERE

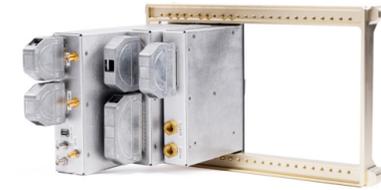## YOUR FLIGHT DECK, REINVENTED.

Welcome to the future of avionics: a system designed for uncompromised safety, unmatched clarity, and seamless adaptability to any aircraft environment. Lightweight and easy to install, Guardian is the first truly modular cockpit avionics system, complete with the industry's highest resolution display with realistic synthetic vision.

NRS1000 | *ADAHRS*

The NRS1000 ADAHRS provides tactical-grade sensor performance and highly reliable air data computation to support precision flight control and navigation.

Key Features:
- Tactical Grade Sensors:
- Gyroscope: ±500°/s on pitch, roll, yaw
- Accelerometer: ±8g dynamic range
- Magnetometer interface for heading
- Accuracy:
- Pitch/Roll: 0.25° static, 0.50° dynamic
- Heading: 0.5° static, 2° dynamic
- Reliability:
- MTBF: 1 million hours (MIL-HDBK-217F @ 40°C)
- Operational up to 55,000 ft / 450 knots
- Advanced Air Data Computer:
- RVSM-capable
- ARINC-429 autopilot interfaces
- Platinum RTD or thermocouple OAT input
- Magnetometer input for enhanced precision

NIO1000 | *SMART I/O INTERFACE*

The NIO1000 Smart I/O Interface ensures seamless integration with both legacy and modern avionics by supporting a vast range of inputs and outputs.

Key Features:
- Inputs:
  - 21 ARINC-429/568 + RS-232/422/485
  - 8 XYZ Synchro
  - 13 Discrete (programmable)
  - 19 Analog + 1 DC Sin/Cos
- Outputs:
  - 6 ARINC-429
  - 4 RS-232/422/485
  - 2 XYZ Synchro
  - 6 Analog
- Engine Monitoring:
  - Dual Engine Data Computer interfaces

Compatibility:
- Garmin GTN/GNS, Avidyne IFD
- VOR/LOC/GS (analog/digital)
- TACAN, ADF, DME
- ADS-B In/Out, TCAS I/II
- WX500, ARINC-708A weather radars

Benefits:
- Broad protocol support simplifies wiring
- Enables adapter-free upgrade paths
- Fully programmable for aircraft-specific needs
- Built for maintenance access and long-term flexibility

GUARDIAN
BY NIGHTHAWK FLIGHT SYSTEMS, INC.

NEXT GENERATION PRIMARY FLIGHT DISPLAY

NIGHTHAWK FLIGHT SYSTEMS, INC.
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Fly Safe. Fly Guardian.
The new standard in avionics integration.
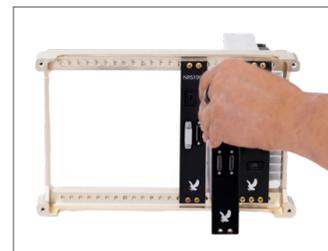
EVERYTHING YOU NEED. **INCLUDED.**

The Nighthawk Guardian system delivers a full suite of capabilities, right out of the box. From advanced flight visualization and terrain awareness to unmatched connectivity, compatibility, and system intelligence, every feature is included to ensure pilots have the tools they need, without hidden costs or locked upgrades.

No unlock fees, no upgrade surprises.
Industry-best display tailored to your needs – not ours.

Core Display & Interface:
- 11.6" Full HD, 1600-nit touchscreen (largest in its class) providing exceptional readability even in direct sunlight (Standard)
- Multi-touch with gesture and turbulence stabilization (Standard)
- Flexible layout modes (PFD, MFD, split view) (Standard)
- Enhanced, realistic 3D synthetic vision (Standard)

Flight Instruments & Navigation:
- Tactical Grade AHRS (Standard)
- RVSM-capable air data computer (Standard)
- Aircraft-adaptive terrain awareness (Standard)
- Active flight plan display (Standard)
- Georeferenced charts, maps, airport diagrams (Standard)
- Points of interest & nav aids (Standard)
- Airspace region visualization (Standard)
- Sectionals and procedures (Standard)

Connectivity & Updates:
- Wireless tablet interface (Standard)
- Over-the-Air or USB-based software updates (Standard)
- Efficient database update capability (Standard)
- Dual USB-C ports (data + 65W charging) (Standard)
- WiFi 6e and Bluetooth 5.3 wireless connectivity (Standard)
- Free software updates (Standard)

Traffic & Weather:
- ADS-B In traffic and FIS-B weather support (Standard)
- WX500 and ARINC-708A weather radar input (Standard)

System & Safety:
- Backup/failover GPS receiver with antenna (Standard) [1]
- Engine information display (coming soon)
- System status monitoring (Standard)
- User-configurable preferences & settings (Standard)

Effortless Instalation:
- Single Cable Display Connectivity
- Minimal install time & aircraft downtime
- Modular LRUs – expandable as desired, not required
- Field-serviceable design
- Fits seamlessly into any aircraft environment

Best-in-Class Compatibility:
- Keep your current stack or upgrade on your time and budget
- No expensive adapters required
- Compatible with:
  - Garmin GTN/GNS, Avidyne IFD
  - VOR/LOC/GS (Analog & Digital)
  - ADS-B, TAS/TCAS I/II
  - WX500, ARINC-708A
  - S-TEC/Genesys advanced digital & most analog autopilots
  - 14VDC and 28VDC systems

NDU1160 | *DISPLAY*

The NDU1160 is the visual core of the Nighthawk Guardian system, delivering brilliant clarity, touch-driven control, and exceptional situation awareness in any flight condition. Its 11.6" ultra-bright display is the largest in its class, built for direct sunlight readability, rapid responsiveness, and smooth interaction.

Key Features:
- 11.6" Full HD Display with 1600-nit brightness and bonded glass for sunlight readability
- Multi-touch Interface with gesture support and turbulence-tolerant stabilization
- Flexible Layout Modes: Full-screen PFD, MFD, or split PFD/MFD view
- Enhanced, realistic 3D Visualization: Terrain, buildings, roads, waterways, traffic, and Special Use Airspaces
- Redundant Controls: Touchscreen plus tactile interface
- Primary Flight Display (PFD)
- Airspeed, Attitude, Altitude, Vertical Speed tapes with target bugs, range strips, and trend vectors
- Integrated Turn Coordinator, Adaptive Rate Turn Indicators, and Unusual Attitude warnings
- Flight Director (Single or Dual Cue), Lateral & Vertical Deviation Indicators
- Compass Arc with heading/course pointers, Wind, and Ground Speed
- Ground Proximity & Terrain overlays for enhanced low-level awareness

Multi-Function Display (MFD):
- Digital Twin Moving Map with Flight Plan overlay
- Live Traffic & FIS-B Weather overlays
- 3D Terrain, Airspace boundaries, Navigation Aids, Points of Interest
- Sectionals, Procedures, Airport Diagrams (geo-referenced)
- System Health & Status, User Preferences, Configurable Data Blocks

The NDU1160 brings everything together—flight, navigation, and environment—in one smooth, responsive display. It's not just readable. It's pilot-ready.

NMC1000 | *MISSION COMPUTER*

The NMC1000 Mission Computer is the high-performance core of the Guardian system, delivering rapid data processing and advanced graphics rendering to ensure real-time situation awareness and seamless pilot interaction.

Key Features:
- Dual Display Outputs:
  Supports two independent display devices for flexible cockpit configurations, enabling split-screen and multi-screen setups
- Ultra-fast User Interface and Graphics:
  Equipped with cutting-edge processing hardware, the NMC1000 powers a highly responsive user interface and fluid instrument display, ensuring smooth transitions and instantaneous control response
- Wireless Connectivity:
  Integrated WiFi 6e and Bluetooth 5.3 provide reliable, high-speed wireless data exchange for tablet interfaces, system updates, and peripheral device connections
- Backup GPS Receiver with Puck Antenna:
  Includes a redundant GPS receiver and antenna to maintain position awareness and system reliability in case of primary GPS failure
- Audio Alert Output:
  Provides dedicated audio channels for cockpit alerting and warnings, enhancing pilot situation awareness
- *High-Definition Video Input (SMPTE H.264/H.265)[1,2]*
  - Picture-in-picture, windowed, or full-screen display modes
  - Video scene overlay, merging, and blending for integrated situation visuals

[1] *Future free software upgrade*
[2] *When properly equipped*