



2025

ABOUT

At LX Navigation, we proudly celebrate 50 years of innovation and dedication. To commemorate this milestone, we're thrilled to introduce our special anniversary edition product: Navia. This launch underscores our unwavering commitment to cutting-edge navigation solutions and exceptional customer experiences.

We are excited to have thrived in the market for so long, a testament to our ability to consistently deliver groundbreaking innovations over five decades.

After years of continuous development, we recognized the need for a significant shift in approach. We needed a new paradigm.

When we began developing this new system, we decided it was time for true innovation. A bold move that required us to redesign every aspect of the system.

We meticulously examined each step, solution, and component, driven by our core motivation: to enhance safety, reduce pilot workload, and reignite the joy of flight.

For the past four years, a team of over 30 skilled engineers has dedicated themselves to developing this next-generation avionics system. Navia is the first system designed to cater to all types of flying: gliders, motorgliders, ultralights, experimental and home builds—you name it.

We celebrate this incredible journey of LX Navigation. Our success is rooted in the steadfast support of our customers, partners, and dedicated team members. Together, we have navigated challenges, embraced opportunities, and achieved remarkable milestones.

Nik Šalej, CEO



LX NAVIGATION
50 YEARS

HISTORY



The Original (1975-2010)

LX navigation story began in 1975 in Celje, Slovenia. A young and enthusiastic pilot from local Aeroclub started producing electronic variometers used in gliders in his home workshop and the rest is history.



First Change (2010-2015)

After years of continues development and countles inovations, LX navigation decided to refresh its appeareance for the first time. A new logo that keeps the original colors and part of the "bird wing" in LX was born.



Cleaning Era (2016-2020)

This time we can call it an evolution. New typography , new colors and cleaner LX. This reflect new GUI and UX in all our devices. As we have cleaned the logo we cleaned our displays.



The Future (2021-now)

We wanted to introduced back the original sign that represented the bird. The new logo represents the new Era for LX navigation. It is showing that mature posture for a company that is on the market for more than 50 Years.



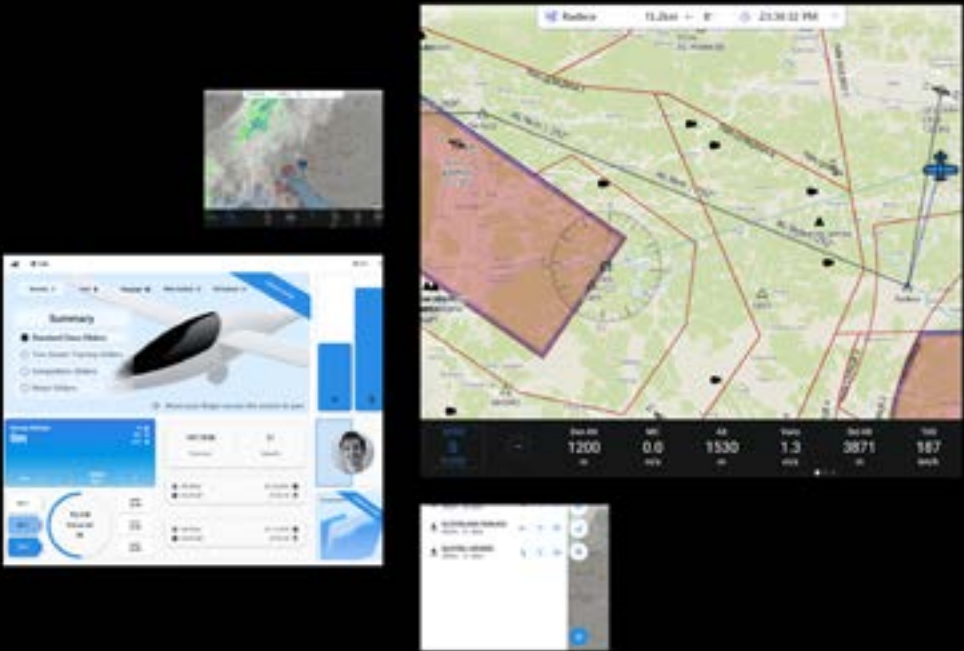
NAVIA
LXNAVIGATION

Navia is a new beginning.
Navia is a new way of thinking.
Navia is a mystery,
and Navia is the only system you will ever need in
the cockpit.



Intuitive, Elegant, Powerful, Efficient

Experience the future of flight with Navia OS. Our revolutionary interface is designed for clarity, efficiency, and ease of use, empowering pilots with unprecedented situational awareness and control.



Performance. Welcome Home.



Customizable Layouts

Customize information visible on the display. Change position of your widgets, NavBar items or size of Typography.

Intuitive Navigation

Navia UX is designed as Touch First. It is the only Avionics that can be fully controlled with touch screen only.

Select your base map

Select basemap: Vector, Satellite or FAA sectional VFR and IFR charts.

AI?

InTheAIR!

AI on the Edge

Advanced Voice assistant

AI voice assistant, a first in the aviation industry



Offline: Navia AI operates offline, ensuring reliable voice recognition and response at any location.

Aviation-Specific Vocabulary: Trained on a massive dataset of real-world aviation communications, Navia AI understands the nuances of pilot language and responds accurately.

Seamless Integration: Allowing you to control various functions with simple voice commands.

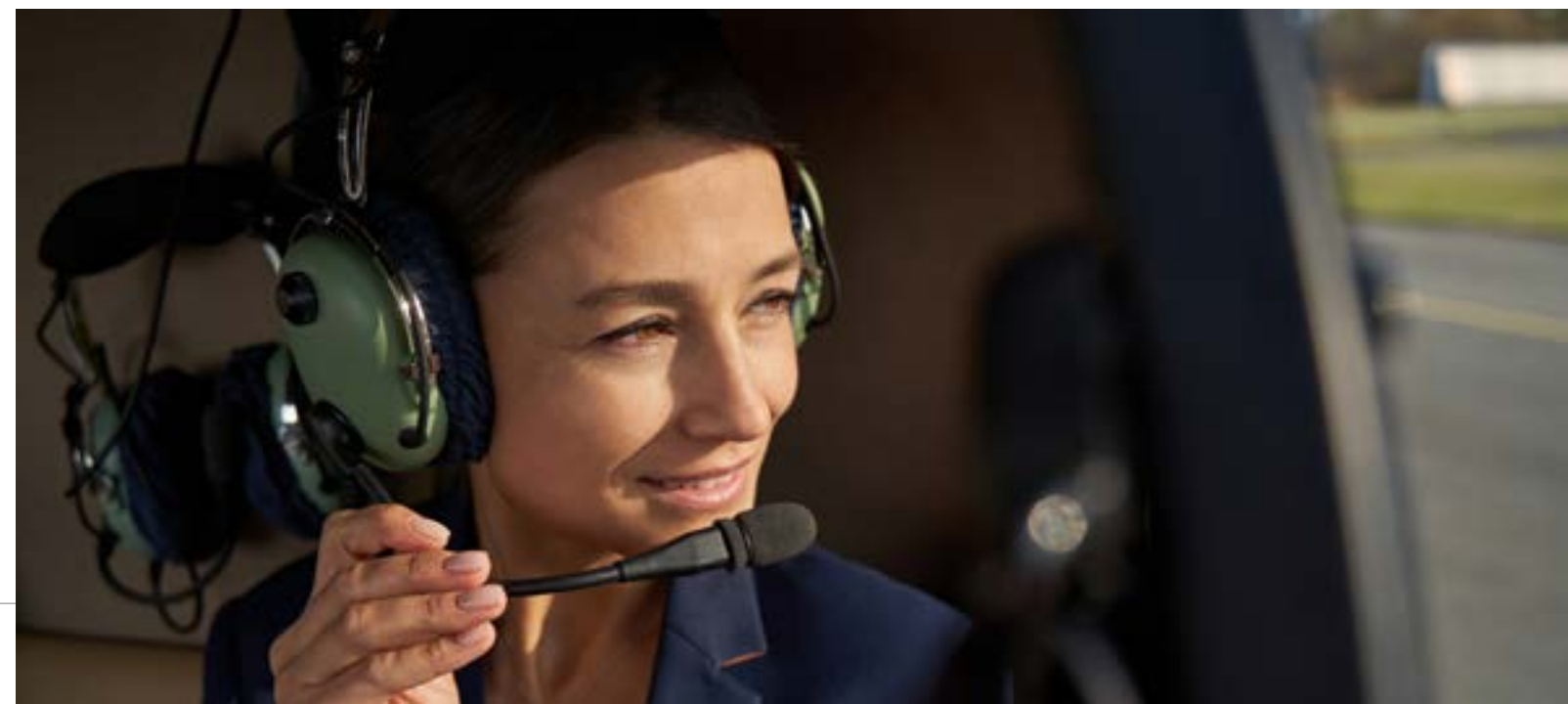
“Set Radio one, two, one decimal three, zero five”

“Search Kilo Oskar Sierra Hotel”

“Direct to Lima Juliet Charli
Lima”

“Set MacCready three point two”

“Set SQUAWK VFR”



LXCLOUD

Stay connected with build-in Global eSIM

Filing a flight plan

Database

FAA Sectional Charts

Live Satellite Weather

Airports

EUROCONTROL

Predictive Maintenance

W&B Reports

Remote Assistance



● Covered

NOTAMs

Live World Web-cams

SkySight

WeGlide

Logbook & Flight Data

Airspace

POI

Manuals and Pilot Documents

SoaringSpot

Backup your data



NAVIA Display 12

- 12" Display - The biggest display in GA
- Full HD resolution
- Anti reflective and antiglare
- MFD Display (explore the map, configure your layout with widgets)

NAVIA Display 7

- 7" Display - Ideal size for Glider panel
- Highest pixel density with Retina resolution
- 2500 nits of Brightness
- MFD or Widget only Display

NAVIA Display 4

- 4" Display - Your widgets display
- Widget only Display (PDF, Widgets, Engine Monitoring Data, etc.)

NAVIA Indicator 57

- Standard round cutout
 - Dedicated display for your Vario information
- Use it together with any other NAVIA Display



Performance. Welcome Home.



Navia Displays redefine performance and efficiency in avionics. Powered by cutting-edge mobile ARM processors, they deliver an unparalleled user experience. Each display boasts an octa-core ARM processor, intelligently combining four high-performance cores with four high-efficiency cores for optimal speed and power management. With 8GB of unified RAM shared with a state-of-the-art 3D graphics accelerator, Navia displays render complex visuals with exceptional fluidity. Further enhancing their capabilities, a dedicated 6 TOPS AI processor enables lightning-fast, real-time voice recognition and intelligent pilot assistance.

8-core ARM

4 High performance &
4 High efficiency cores

8GB RAM

High Speed LPDDR 5
memory

6 TOPS

Advanced GPU with
AI Accelerator



Ultra-Fast PoE

Navia Displays are powered via single Ethernet cable allowing blazing-fast 1 Gigabit Ethernet and eliminating the need for bulky power adapters and simplifying your installation.

Engineered for Extreme Environments

To ensure optimal performance in hot climates, Navia displays feature a unique unibody enclosure crafted from a single piece of aluminium. Design maximizes surface area and thermal conductivity, allowing heat to dissipate quickly and efficiently.





The One. The Core. Pro.

Navia Core Pro is the Heart of the system. It is the foundation of the Navia System. Build your system around Navia Core and explore the possibilities.



Flight recorder

Build in flight recorder. High data rate recording of all your flight information with optional IGC certificate.

Your Airplane Connected

Build in Global eSIM with unlimited coverage.

Dual WiFi, PoE, LTE/5G, Bluetooth

Redundant connections ensuring you are staying connected.

The Most Advanced Navigation System Ever Build. Period.

Feel the difference of pure performance.

Navia Core Pro is the core of Navia Family. It acts as network interface for your Navia system. Connects sensor device, displays, application, cloud, DIY. All via Navia Core Pro. Navia Core Pro combines high performance 4-core ARM cpu and 512GB of SSD with 4 network interfaces and 2 connectors where you connect your Radio, Transponder, Traffic monitor, EMU, AirData sensors, IFR Navigator etc.

Navia Core is compatible with many 3rd Party devices. Continues development and always connected system allows for new integrations in the future. Learn more about our integrations at www.lxnavigation.com/navia-core.

LEARN MORE



Gigabit speed + Power = PoE

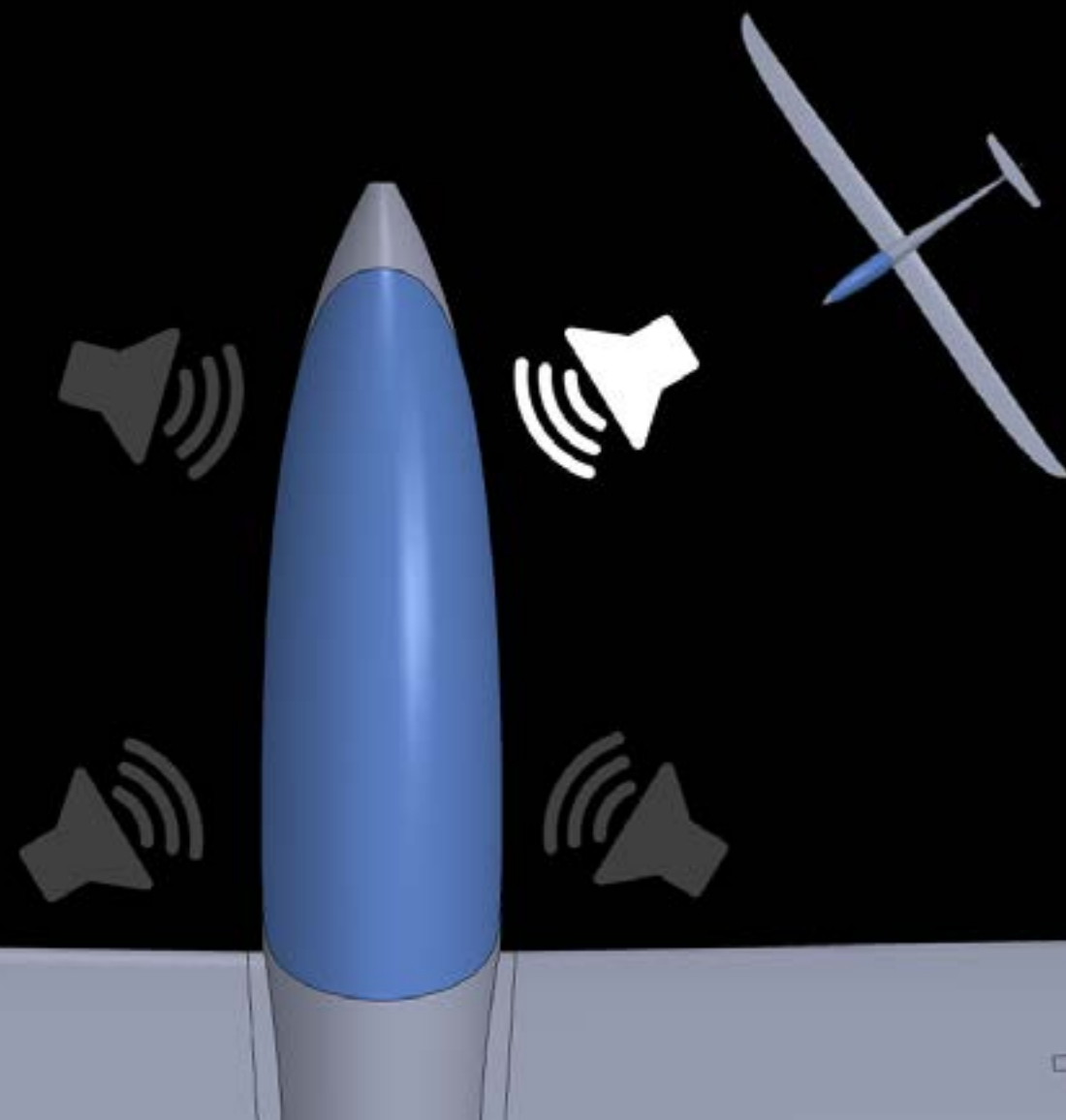
PoE Allowing 1Gbps speeds and 100W of power at the same time.

NAVIA
CORE PRO



Spatial Audio

Hear the traffic warnings from where the traffic is coming.



Open Source

Empowering Innovation.

Open source Hardware and Documented Communication Protocols

Navia empowers innovation through its fully open protocol and hardware designs, freely accessible on GitHub, allowing for seamless integration and customization.

Dive into the future of Experimental aviation with our transparent, community-driven approach, featuring a comprehensive open protocol and hardware repository on GitHub.

Build, modify, and collaborate with Navia's open-source foundation, where our complete protocol and hardware schematics are available on GitHub, fostering a truly accessible platform.

Build your sensor, display, application. Sky is the limit.



SCAN ME





Essential. Reliable. Accurate.

Navia Sense is sensor device that combines Air Data (IAS, Altitude, TE, AoA) measurements with GNSS and IMU sensors. Delivering best in class AHRS data.



High Speed WAAS GNSS

Combining GPS, Glonass, Galileo with WAAS GNSS receiver. Speed and precision combined.

IGC Flight recorder

If you are flying glider Navia Sense comes with the highest level IGC certified flight recorder.

3D Wind. Worlds best vario.

Fused sensor data generates the most accurate 3D wind vector, delivering the world's best variometer.



Select your sensor device.

Are you flying a glider or powered airplane? Do you want AHRS? What about instant 3D Wind and IGC flight recorder? Saftey first, add Angle of Attack sensor? Flying fast?

	Gliding	Gliding Pro	Glding Pro +	Airplane	Airplane Pro	Airplane Pro HS
Airspeed			250kts 460km/h			500kts
Altitude	✓	✓	✓	✓	✓	✓
OAT	✓	✓	✓	✓	✓	✓
G-force	✗	✓	✓	✓	✓	✓
GPS	25 Hz	25 Hz	25 Hz	25Hz	25Hz	25Hz
IGC	✓	✓	✓	✗	✗	✗
AHRS	✗	✓	✓	✓	✓	✓
3D Wind	✗	Optional	✓	✗	✗	✗
Angle of Attack	✗	✗	✗	✗	✓	✓



Never Lose Power. Never Lose Control.

Navia Ups is dedicated backup power solution designed to keep your critical avionics running smoothly, even in the event of a power failure.



Long-lasting Battery

The high-capacity battery offers ample backup time, allowing you to safely navigate and manage critical systems.

Easy Monitoring

Monitor battery status and performance directly on your Navia displays.

Performance? Yes.

18,5V System with 63Wh capacity. Delivering up to 130W of power to the system.

Ultra-Fast. Ultra Powerful.

Navia Hub. Experience the next generation of avionics networking. Connect all your Navia devices together in the World fastest Avionics network.



Ultra-Fast Connectivity

Experience blazing-fast 1 Gigabit Ethernet speeds for seamless data transfer between all your Navia components.

High-Power PoE

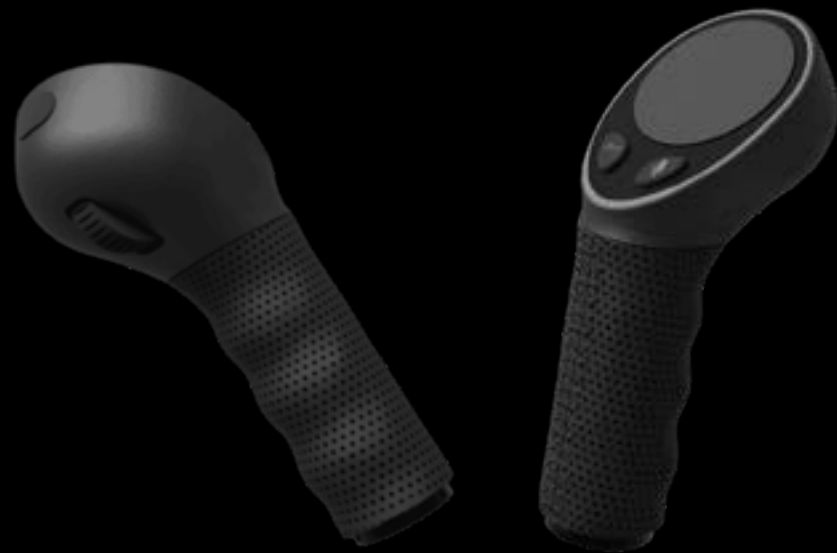
Deliver up to 100W of power at 48V over a single Ethernet cable, eliminating the need for bulky power adapters and simplifying your installation.

Seamless Integration

Integrates seamlessly with Navia Core Pro and other Navia components, creating a unified and efficient avionics network.



Heated. Leather. Vibration Alerts. AI Voice
assistant.



Introducing NAVIA Grip, a revolutionary Human Machine Interaction (HMI) device designed for pilots. Maintain full control while accessing critical flight information, even in challenging conditions. Heated grip for unparalleled comfort in cold weather or high-altitude flights.





Safety is our number one priority.



Dual PowerFLARM Transceivers

Extended range with two FLARM antennas (diversity).
Ideal for metal or carbon fiber airplanes.

ADS-B & MODE-S Receiver

Only 3rd party PowerFLARM device with ADSB receiver that can also detect Mode-S traffic and issue potential warnings.

WIFI & Bluetooth

Configure your device via built in Configuration portal. Send traffic to your navigation application on iOS or Android via WIFI/Bluetooth.

WiFi Portal

Configure your Traffic device

Use your smart device (Smart phone, Tablet, PC, MAC) to connect to the WiFi. Once the successfully connected, you will be able to configure your device with Navia Traffic configurator.

- Update the system
- Monitor the range
- Configure Data outputs.
- Use it as a monitoring app



Connect your favorite Application or Device

connect your tablet or device and enjoy Traffic information on compatible devices. Navia Traffic can send data over Wifi or Bluetooth and via 3 dedicated Serial ports. Choose between NMEA or GDL90. Optionally available with external ARINC 429.

- | | | |
|--------------------|---------------------------|-----------|
| • Garmin G3X, Aera | • SeeYou Navigator, Oudie | • iGlide |
| • Dynon | • SkyDemon | • XCSoar |
| • Kanardia | • Foreflight | • EasyVFR |



What kind of signal can you detect? Flarm, ADS-B, Mode-S, Fanet, SSR, ADS-R, TIS-B?

YES

	Navia Traffic (Flarm Only)	Navia Traffic (Dual Flarm & ADSB) Only	Navia Traffic (ADSB & UAT)
Flarm	Single	Dual	×
ADSB	×	✓	✓
ADS-R	×	✓	✓
Mode-S	×	✓	✓
IGC	Option	Option	×
Weather	×	×	✓
ADS-L Ready	✓	✓	×



Enjoy the sky!
We are making your flying safer than ever before.



Monitor. Predict. Fly More.
Engine Monitoring Redefined. Standalone or part of Navia.



Intuitive Interface, Data Logging and Analysis.

Navia EMU is the ultimate engine monitoring solution, designed to optimize performance and extend the life of your aircraft's engine. This advanced system provides real-time data on critical engine parameters, enabling proactive maintenance and predictive analytics.

Standalone or part of Navia System

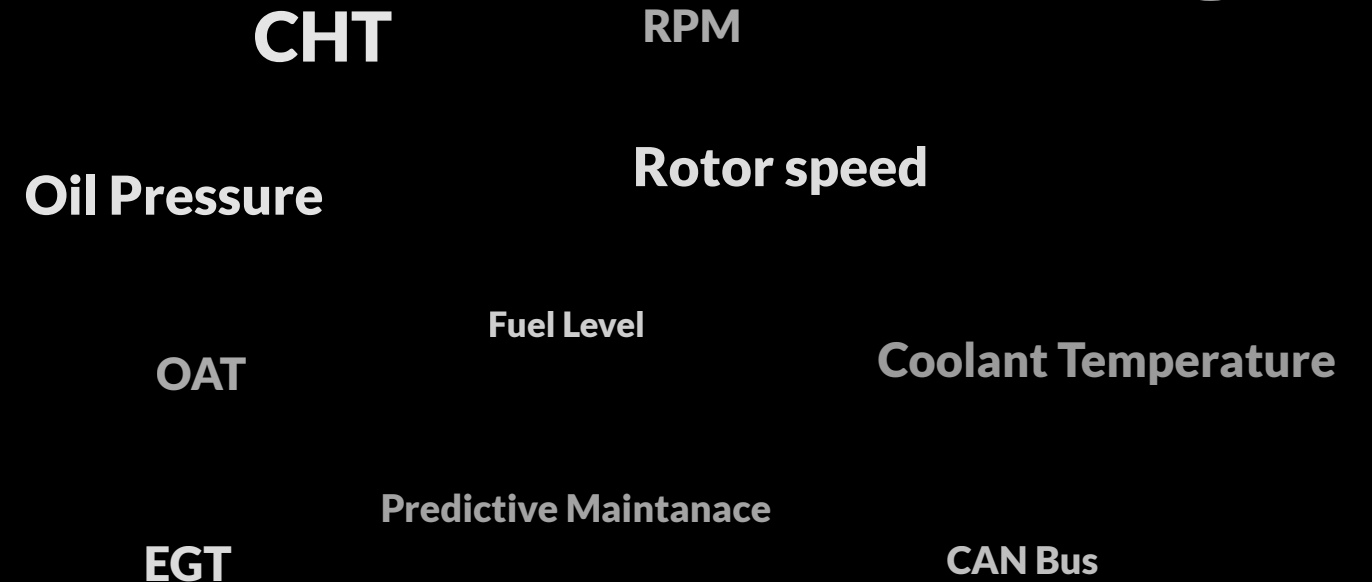
Navia Emu is designed to work as standalone Engine Information System or as a part of Navia system.

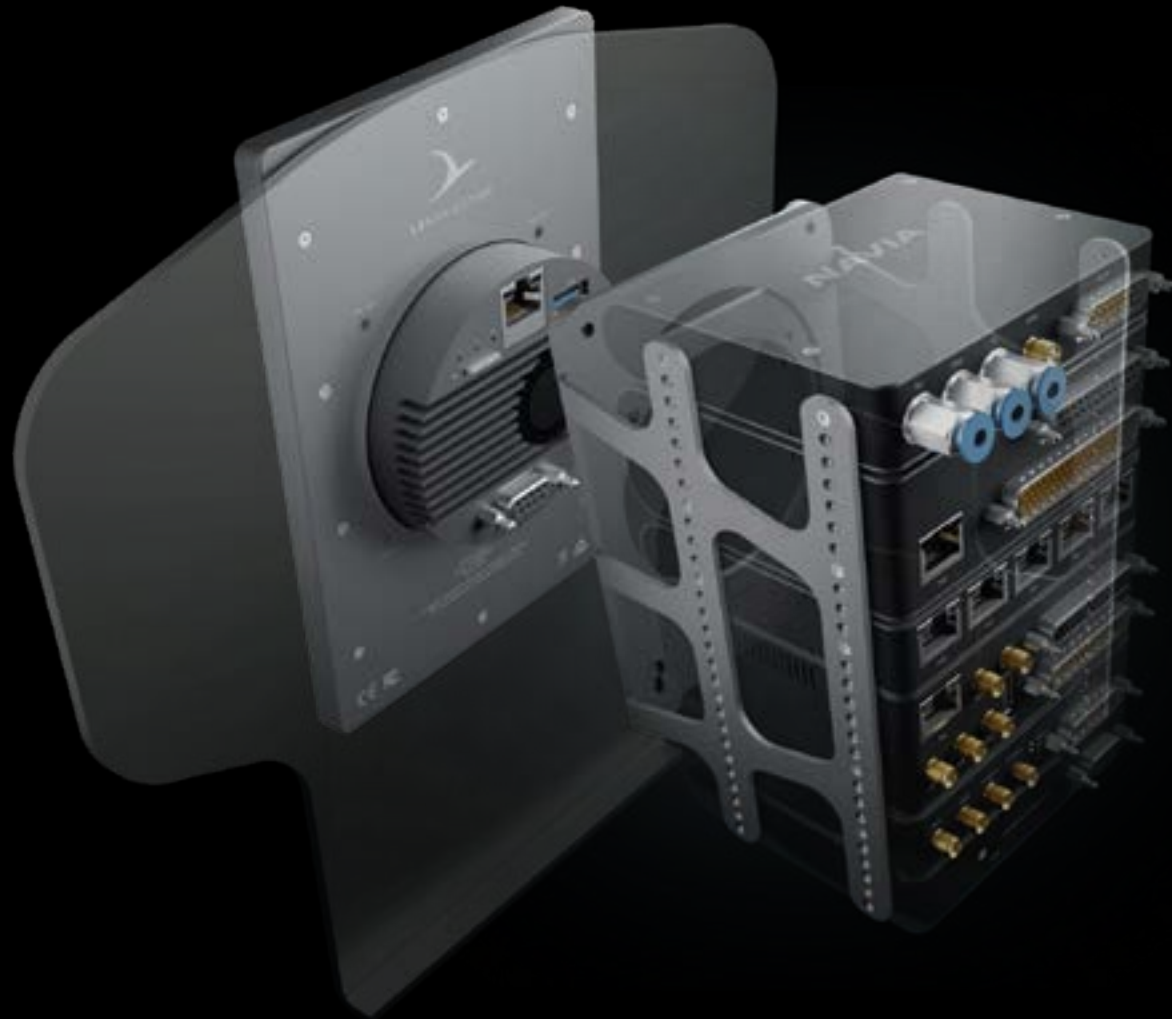
Predictive maintenance

Navia Emu actively monitors status of your engine. Navia Emu will issue a warning if potential issue is detected.

Cylinders: 2, 4, 6, 8, more?

Navia Emu can monitor any type of engine. A single Navia EMU is designed for engines up to 6 cylinders. Combine more devices if you have more cylinders.





Avionics are Hard to install? Not at all!

With Navia we were thinking about everything, including installation. Explore our installation solutions

Navia Rack is the most intuitive way of installing your avionics.

With Navia Rack we have standardised the dimensions of our devices.

All Navia devices adhere to the 4" width you can easily mount into our racking solution.



WHAT DO YOU NEED?

Building blocks

How to build your Navia system



Navia is designed as a modular avionics. You can tailor the configuration according to your needs and requirements. Let's explore some key steps while deciding for your Navia system.

Navia Core Pro: This is the heart of the system. The main device that is required to step into Navia World. It acts as network interface, AI assistant, connects all 3rd party devices and serves latest data via PoE or WiFi interfaces.

Step 1: Select your Display

Displays are most visible part of Navia system. Every Navia display can be configured as MFD with Map and Widgets or Widget only display (eg. PFD, EIS). You can connect multiple Displays to a single Navia system.

Are you flying a glider?

Select one Navia Display 12 for futuristic cockpit or Navia Display 7 and Navia Indicator 57 for traditional one.

Are you flying a powered airplane and want all what is possible?

Select two Navia Display 12, one Navia Display 7 and two Navia Display 4

Are you flying Vintage Airplane or you are on low budget?

Skip the Displays. Navia system can run on your tablet (Android, iOS, Windows). Install other modules and keep the original instrument panel intact. You can still enjoy the full Navia experience.

Step 2: Do I need a Navia Hub?

Navia Hub is needed when you want to connect more than one device like Navia Display to Navia Core. In general most configurations require Navia Hub. An example where a Navia Hub is not needed is a single seat Glider with a single Navia Display or vintage airplane with Navia Core and Navia Emu and no Navia Display.

Step 3: Select your Sensors

Measures Air data, GNSS and AHRS information. Navia system is designed to allow multiple sensors on board for additional safety and redundancy. Select one or more Navia Sense devices.

Navia is designed to allow sensors from 3rd party producers. Connect iLevil devices to Navia and use provided data. (Suggested devices are iLevil AP, iLevil AW or BOM).

Step 4: Safety first. Collision avoidance system.

Add situational awareness device like Navia Traffic.

Flying in Europe: Select Navia Traffic with Dual Flarm and ADSB to get most of the coverage.

Flying in US: Select Navia Traffic with ADSB and UAT. This will give you traffic and weather information.

You can connect any 3rd party Flarm compatible device to the Navia system. You can connect any ADSB-In device via GDL 90 protocol.

Step 5: Engine data

Add Navia Emu. In case of more than 6 cylinder engine or multiple engines add more Navia Emu devices.

Step 6: Are you flying with a stick?

Navia takes great advantage of Navia Grip. Select one Navia Grip for single seat airplane or two for dual seats.



EXPERIMENTAL & ULTRALIGHT

Display Configurations

Explore what is possible with Navia Family



The Ultimate Navia Experience

Two Navia Displays 12, one for each pilot as MFD, controlling all aspects of your airplane. Two Navia Display 4 acting acting as PFD. One Navia Display 7 used as Engine Monitoring display, AP display unit etc. This system requires Navia Core Pro with Navia Sense Airplane Pro, Navia EMU and Navia Hub. For saftey add Navia Traffic and Navia UPS. For Backup add IRIS AiO and IRIS EFIS. Used in combination with Constant Speed Governor



Ultimate Tandem Airplane

Navia Displays 12 as MFD, controlling all aspects of your airplane. Two Navia Display 4 acting acting as PFD, Engine Monitoring display, AP display unit etc. This system requires Navia Core Pro with Navia Sense Airplane Pro, Navia EMU and Navia Hub. For saftey add Navia Traffic and Navia UPS.



Simple VFR

Navia Displays 12 as MFD, controlling all aspects of your airplane. This system requires Navia Core Pro with Navia Sense Airplane. For saftey add Navia Traffic and Navia UPS. Added Iris EFIS Pro and Iris AiO for Backup.

GLIDERS

Display Configurations

Explore what is possible with Navia Family



The Ultimate Gliding Experience

Single Navia Displays 12, as MFD, controlling all aspects of your airplane. This system requires Navia Core Pro with Navia Sense Glider Pro + and Navia Hub. For safety add Navia Traffic Flarm and ADSB and Navia UPS. Use Iris All in One Certified as main Airspeed and Altimeter.



No Space for Navia Display 12?

Single Navia Displays 7, as MFD, controlling all aspects of your airplane. Add one or two Navia Display 4 for your widgets vario indication, airspeed and altimeter. This system requires Navia Core Pro with Navia Sense Glider Pro + and Navia Hub. For safety add Navia Traffic Flarm and ADSB and Navia UPS. Use Iris All in One Certified as main Airspeed and Altimeter.



Glider classic.

Single Navia Displays 7, as MFD, controlling all aspects of your airplane. One Navia Indicator 57 for vario indication. This system requires Navia Core Pro with Navia Sense Glider Pro + and Navia Hub. For safety add Navia Traffic Flarm and ADSB and Navia UPS. For Backup add Era 57. Use Iris All in One Certified as main Airspeed and Altimeter.

Specifications



	Display 4	Display 7	Display 12	Indicator 57
Display size:	4" (101,6mm)	7" (177,8mm)	11,6" (294.64mm)	2.5" (294.64mm)
Active area:	2.8" (72mm)(w) x 2.8"(72mm)(h)	3.7"(95mm)(w) x 6"(151mm)(h)	10.1"(256mm)(w) x 5.7"(144mm)(h)	57mm (2.24")
Unit dimensions:	86.2mm(3.39")(w) x 88.2mm(3.47")(h)	113mm(4.45")(w) x 168.5mm(6.63")(h)	272.9mm(10.74")(w) x 164.6mm(6.48")(h)	63.0mm(2.48")(w) x 62.5.6mm(2.46")(h)
Depth behind panel:	20.2mm (0.8")	21.2mm (0.83")	5mm (0.2")	61mm (2.4")
depth in front of panel:	8.2mm (0.32")	8.4mm (0.33")	8.4mm (0.33")	8.4mm (0.33")
Unit weight:	165g	327g	605g	172g
Resolution:	720x720px	1200x1920px	1920x1080px	320x240px
Maximum brightness:	1200nits	2500 nits	1600nits	1600nits
Interface:	PoE, RS232, USB	PoE, RS232, USB	PoE, RS232, USB	RS232, WiFi

Navia Core Pro

Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 41.5mm(1.63")(h)
Unit weight:	315g
Interface:	POE, RS232, WiFi, Bluetooth, LTE

Navia Sense

Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 22mm(0.87")(h)
Unit weight:	138g
Interface:	RS232
Max Airspeed:	250 kts / 460 kmh (HS: 500kts / 920kmh)
Max Altitude:	49000 ft or 15000m

Navia Hub

Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 22mm(0.87")(h)
Unit weight:	140g
Interface:	PoE

Navia UPS

Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 22mm(0.87")(h)
Unit weight:	334g
Battery	63 Wh
Capacity:	

Navia Traffic

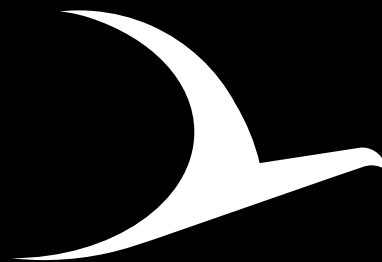
Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 22mm(0.87")(h)
Unit weight:	153g
Interface:	RS232, WiFi, Bluetooth, ARINC 429 (Optional)

Navia EMU

Unit dimensions:	104mm(4.09")(w) x 91mm(3.58")(l) x 41,5mm(1.63")(h)
Unit weight:	203g
Interface:	RS232, POE, CAN,

Navia Grip

Unit dimensions:	143mm(5.63")(h) x 54mm(2.13")(w) x 63mm(2.48")(l)
Compatible tube:	Up to 1 inch (25,4mm)
Unit weight:	141g
Interface:	USB, WiFi, Bluetooth



LXNAVIGATION
50 YEARS

USA

LX navigation USA
1704 Kennedy Point
1124

EUROPE

LX navigation d.o.o.
Tkalska ulica 10,
SI-3000 Celje, Slovenia