

LX iris series



Technical datasheet

- LX navigation -

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Document information

0.1 Abstract

This document represents the technical datasheet for the LX iris series. The user manual, installation manual and additional info can be found on www.lxnavigation.com.

0.2 Document status

Document status: PUBLIC

Document status	Explanation
Internal	Intended only for LX navigation staff
Public	Available publicly to all
Personal	Intended for a specific person and/or company, noted on this page
Dealer	Intended for a specific dealer, noted on this page
Manufacturer	Intended for a specific manufacturer, noted on this page

0.3 List of applicable products

Device	Size	HW Version
LX iris ASI		
LX iris altimeter		
LX iris all-in-one	57 & 80 mm	1.0 - 1.9
LX iris g-force		
LX iris chrono		
LX iris display		

0.4 Revision history

Document name	Document revision	Date	Revised by	Approved by	Notes
LX_ISTD	R1	23.12.2022	A.S.	N.S.	initial release
LX_ISTD	R2	6.5.2025	B.D.	N.S.	minor changes

Technical specification

1.1 General

Description	Unit	LX iris 57	LX iris 80
Dimensions (all-in-one)	[mm]	62 x 62 x 98*	82 x 82 x 89*
Power supply	[V DC]	9.0 - 29.0	
Nominal Voltage	[V DC]	13.8	
Average Power Consumption	[W]	1.8	
Mass (all-in-one)	[g]	217*	276*
Mounting Panel Cutout	[mm]	57	80
Ground Survival Temperature	[°C]	-55 - +85	
Operating Temperature	[°C]	-20 - +55	
Relative Humidity	[%]	0 - 98	
Max. Operational Altitude	[ft]	45,000	
Operational Shock		6 g	
Crash Safety Shock		20 g	
Vibration		DO-160D U F/F1	
Total pressure sensor range	[hPa]	0 - 100 (up to 460 km/h)	
Static pressure sensor range	[hPa]	10 - 1200	

* Note that upper data is valid for all-in-one configuration. Some iris series devices does not have push-rotary knob and/or pressure sensors which reduce the unit overall depth and mass.

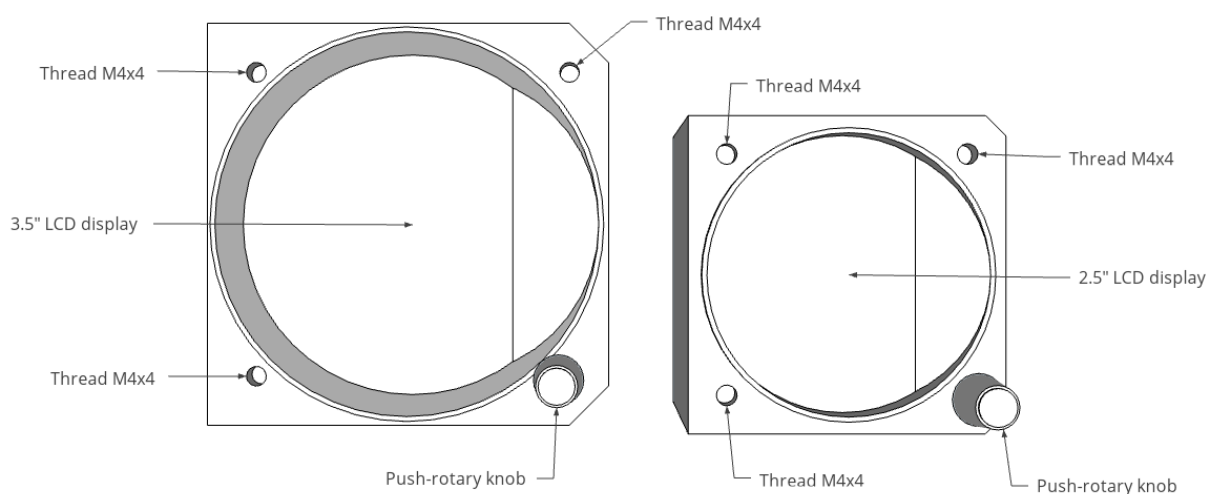


Figure 1. Instrument overview

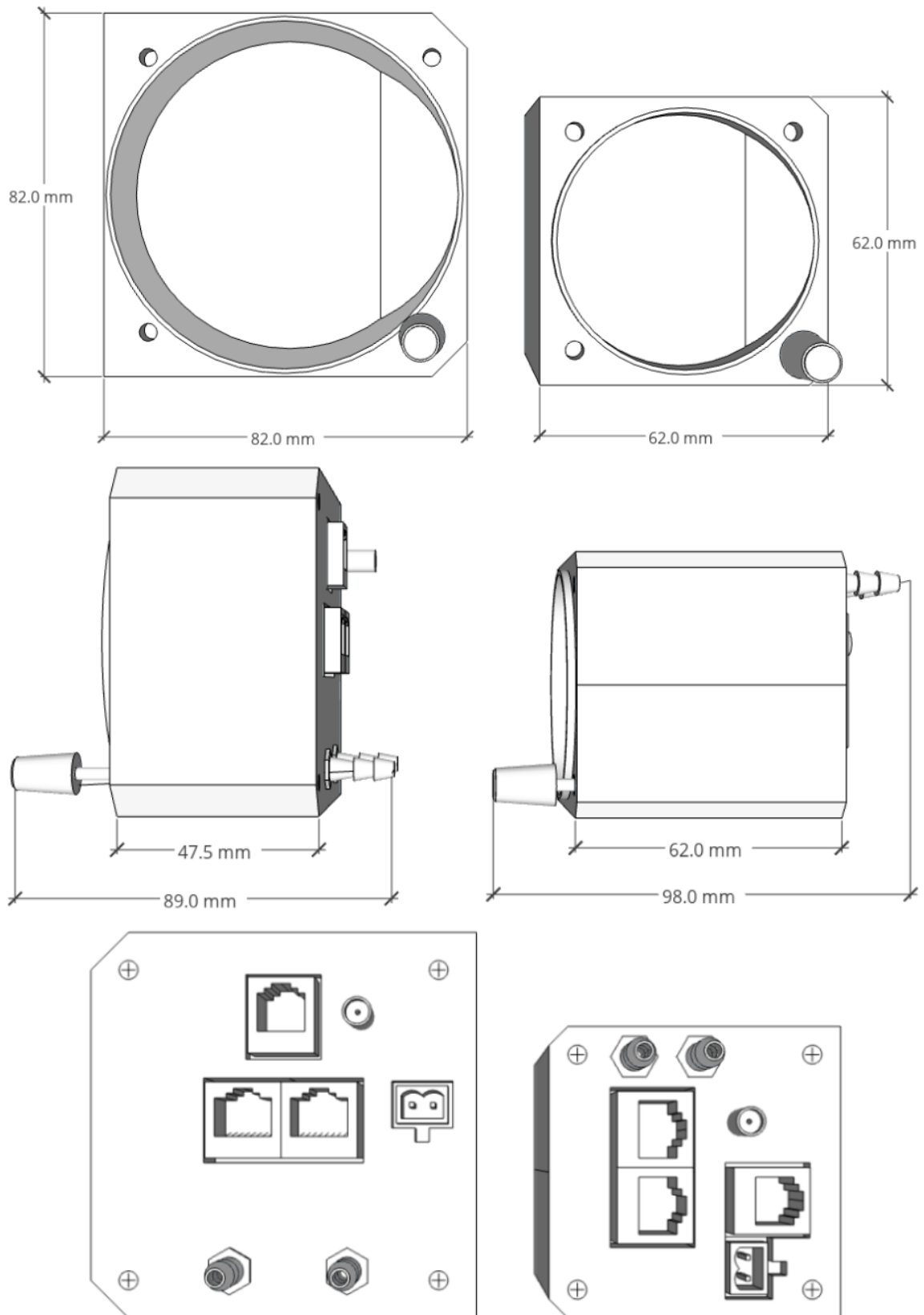


Figure 2. Instrument dimensions

Environmental data

Description	Section	Category	Conditions
Temperature / Altitude	4.0	D1	
Low Ground Survival Temperature	4.5.1	D1	-55 °C
Low Operating Temperature	4.5.1	D1	-40 °C
High Ground Survival Temperature	4.5.2	D1	+85 °C
High Short Time Operating Temperature	4.5.2	D1	+70 °C
High Operating Temperature	4.5.3	D1	+55 °C
In Flight Loss of Cooling	4.5.4	Z	No auxiliary cooling required
Altitude	4.6.1	D1	45,000 ft
Temperature Variation	5.0	B	
Humidity	6.0	A	
Shock	7.0	B	
Vibration	8.0	U/U2	Vibration curve F/F1 (robust vibration, helicopter)
Explosion Proofness	9.0	X	not tested
Water Proofness	10.0	X	not tested
Fluids Susceptibilities	11.0	X	not tested
Sand and Dust	12.0	X	not tested
Fungus Resistance	13.0	X	not tested
Salt Spray	14.0	X	not tested
Magnetic Effect	15.0	Z	less than 0.3m
Power Input (DC)	16.0	B	
Voltage Spike Conducted	17.0	B	
Audio Frequency Conducted Susceptibility	18.0	B	
Induced Signal Susceptibility	19.0	X	not tested
Radio Frequency Susceptibility	20.0	T	Radiated Susceptibility T
Conducted Susceptibility Emission of RF	21.0	M	
Lightning Induced Transient Susceptibility	22.0	A2XXX	
Lightning Direct Effects	23.0	X	not tested
Icing	24.0	X	not tested
Electrostatic Discharge (ESD)	25.0	A	
Fire, Flammability	26.0	X	enclosure made of aluminum (Al) sheet

Environmental tests are performed in accordance with RTCA DO-160.

Conformity

Declaration of CE Conformity

Identification of product

LX iris series (all variants)

Manufacturer

LX navigation d.o.o.
Tkalska ulica 10
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Slovenia

Related standards

EMC directive 2004/108/EC

This product is designed to comply with standards/regulations and technical specifications stated above. This certificate is granted subject to the LX navigation quality rules on product certification.

Remark

The product is designed to comply with LX navigation standards and standards harmonized with directive 2004/108/EC: EN 55022:1998+A1:2000+A2:2003, class A; EN 55024:1998+A1:2001+A2:2003; EN 61000-3-2:2000+A2:2005; EN61000-3-3:1995+A1:2001+A2:2005

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