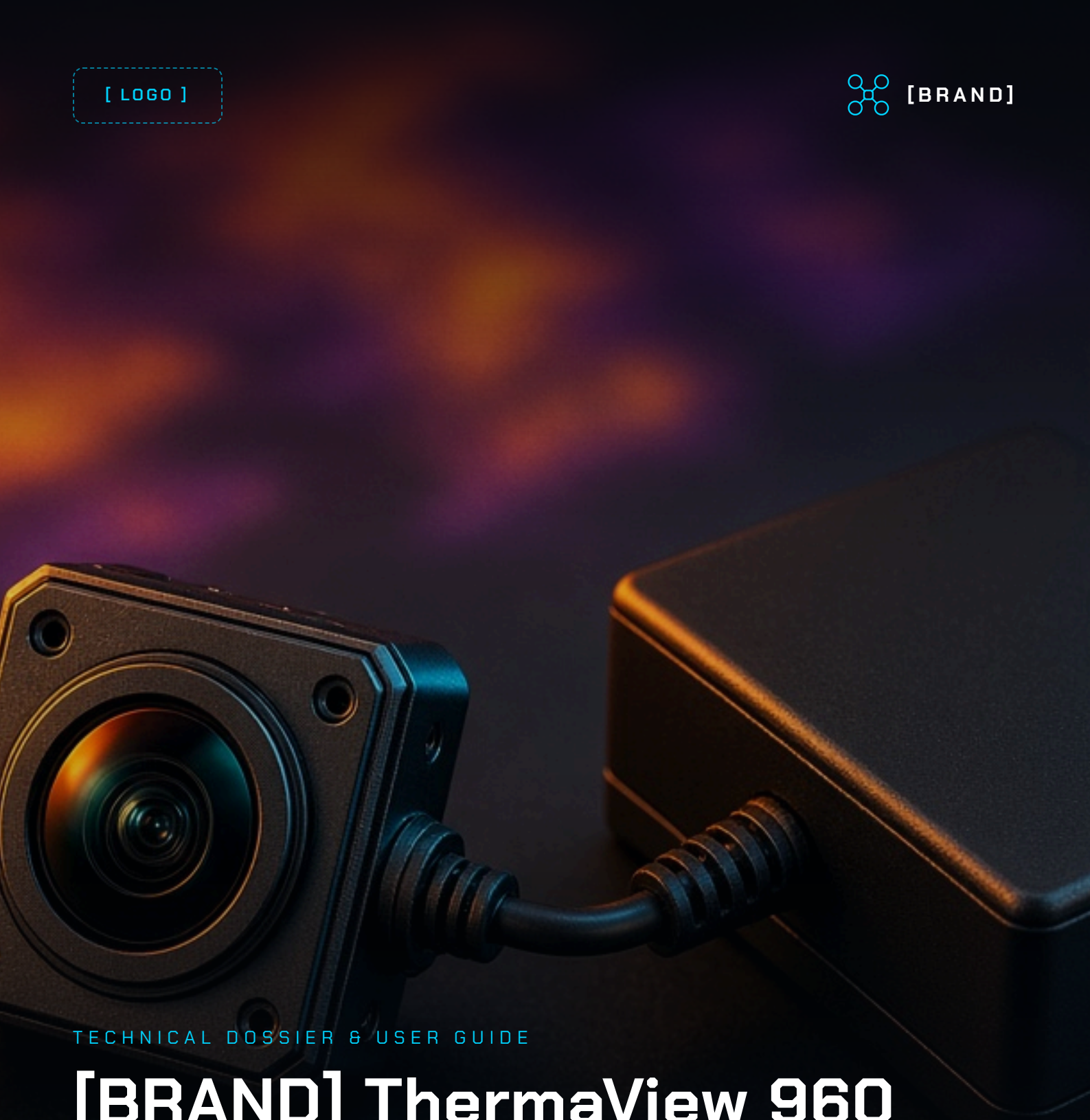
[LOGO]

[BRAND]



TECHNICAL DOSSIER & USER GUIDE

[BRAND] ThermaView 960 HD thermal camera

Installation, connection, configuration and complete technical data for the ThermaView 960 thermal camera in its GT8 and PX versions.

960 × 768 PROCESSED | DUAL OUTPUT HD + UVC | 5 PALETTES | CUSTOM OSD

[Company name] · [Phone] · [Email] · [Web]

CONTENTS

Technical dossier & user guide

This guide explains how to install, connect, configure and operate the **[BRAND] ThermaView 960** HD thermal camera for drones, in both of its versions, and contains its complete technical data.

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PRODUCTS COVERED

- **[BRAND] ThermaView 960** — HD thermal camera with processing module (ref. TV-960)
- **GT8 version** — for the [BRAND] AeroLink GT8 VTX
- **PX version** — for the [BRAND] AeroLink PX transmitter

ⓘ Please read this guide completely before installing or powering the system, and keep it for future reference. Images and drawings are illustrative.

01 · PRODUCT OVERVIEW

Thermal vision in HD, built for flight

The ThermaView 960 is a compact thermal camera for drones. Third-generation image enhancement delivers a processed 960 × 768 image in which outlines are sharper and heat sources stand out clearly. The video is sent over the drone's HD digital link and, at the same time, over USB (UVC) for recording or analysis on a computer or AI system.



960 × 768 processed · 50 Hz · F1.0

Illustrative image

Enhanced thermal image
3rd-generation enhancement, 960 × 768 processed.

Dual output
HD digital link + USB UVC simultaneously.

Custom OSD
On-screen text customizable via ADKEY keypad.

1.0–4.0× zoom
Stepless digital zoom controlled via UVC.

5 palettes
Brightness and contrast 0–100.

<1.5 W typical
4.5–20 V supply.

TWO VERSIONS

Version	Transmitter	Live image	Latency (avg.)	Channels	Antennas
GT8	AeroLink GT8 VTX	Recording 1080p / 720p	22 ms	8	2 × IPEX
PX	AeroLink PX	1080p 60 fps	35 ms	3	2 × MMCX

02 · SYSTEM ARCHITECTURE & CONTENTS

How the system fits together

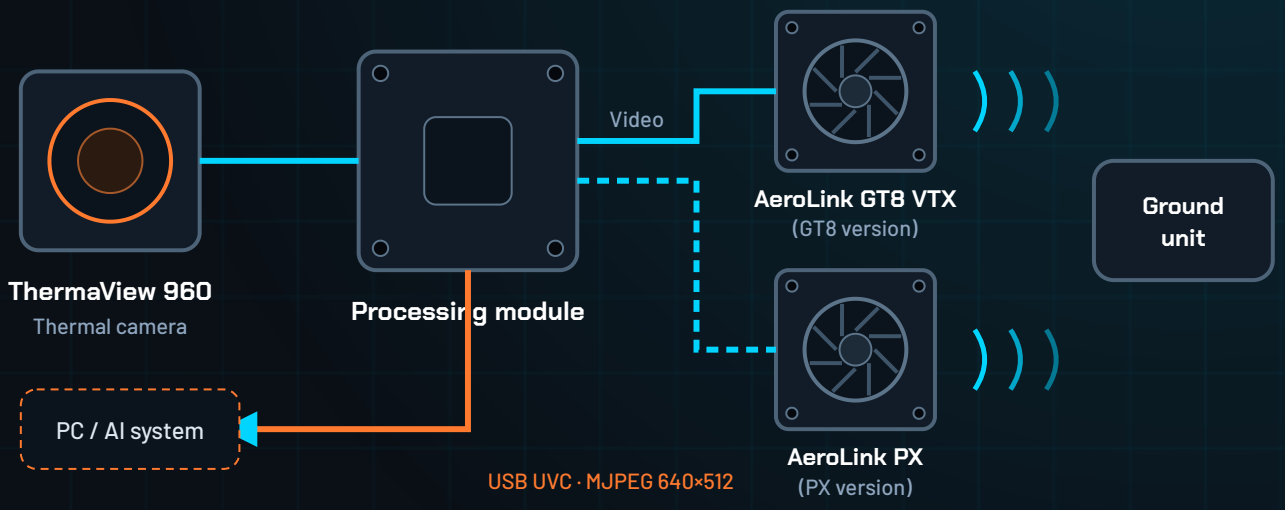


FIG. 1 — System architecture: the camera connects to the processing module, which feeds the transmitter (GT8 or PX version) and, optionally, a computer via USB UVC.

IN THE BOX

- ThermaView 960 thermal camera
- Processing module
- Transmitter according to version (GT8 or PX), if supplied as a kit — confirm the configuration with [BRAND]

OPTIONAL ACCESSORIES

- OSD menu board (ADKEY keypad) for on-screen settings
- UVC (USB) cable for computer / AI connection
- Compatible goggles / ground unit

ⓘ Contact [BRAND] for the exact package contents of your configuration and for available accessories.

03 · TRANSMITTER WIRING

Connecting the transmitter

GT8 VERSION · AEROLINK GT8 VTX

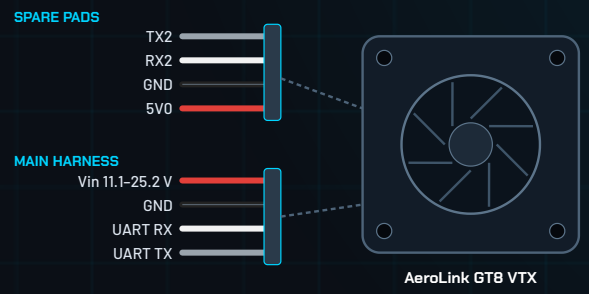


FIG. 2 — AeroLink GT8 VTX connections

⚠ Reference consumption 12 V @ 1.5 A. Check the capacity of your power supply. The transmitter generates a lot of heat: ensure good airflow.

PX VERSION · AEROLINK PX

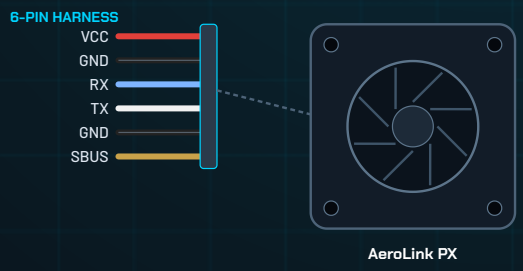


FIG. 3 — AeroLink PX 6-pin connection

⚠ Reference consumption 12 V @ 1.5 A. Check the capacity of your power supply. The transmitter generates a lot of heat: ensure good airflow.

INSTALLATION STEPS

1. Mount the camera, processing module and transmitter on the drone, leaving space for airflow around the transmitter.
2. Connect the camera to the processing module and the processing module's control connection to the transmitter.
3. Fit the antennas to the transmitter before powering on (IPEX on the GT8 version, MMCX on the PX version).
4. Connect the transmitter harness: power input 11.1–25.2 V and GND; UART RX/TX to the flight controller (TX ↔ RX crossed); on the PX version, SBUS as required by your platform.
5. GT8 version only: set the ground unit to **race mode** before use (section 07).

ⓘ Wire colours in the drawings are for illustration; always follow the pin labels printed on the connector.

04 · PROCESSING MODULE CONNECTIONS

Processing module connections

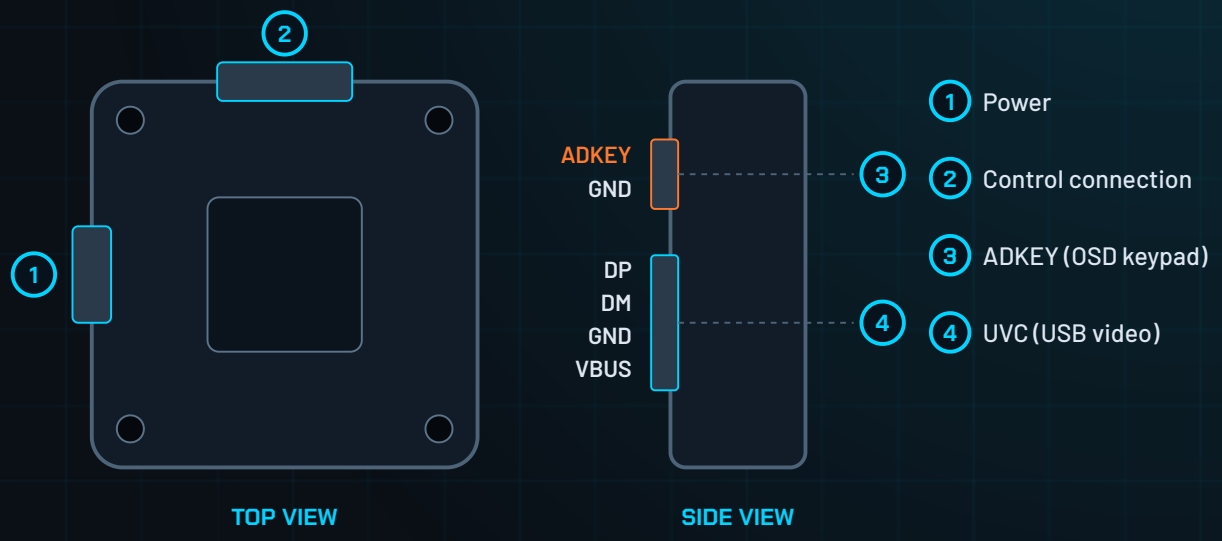


FIG. 4 — Processing module ports (schematic, not to scale)

PORT FUNCTIONS

① Power	Module power input
② Control connection	Link to the video transmitter
③ ADKEY + GND	External keypad (OSD menu board) for on-screen settings and custom OSD text
④ UVC (DP, DM, GND, VBUS)	USB video output to a computer or AI system

⚠ Power consumption reference for the processing module: **12 V @ 120 mAh**, as published by the manufacturer. Contact [BRAND] support if you need further detail on this value.

ⓘ The ADKEY port shares its connector side with the UVC port. Remove the OSD menu board once you have finished adjusting the settings.

05 · USB VIDEO OUTPUT (UVC)

USB video output (UVC)

By connecting a USB Video Class (UVC) cable to port ④ of the processing module, the camera outputs video over USB in **MJPEG** format at a resolution of **640 × 512**. This output works at the same time as the HD digital link to the goggles.

CONNECTION

1. Connect the UVC cable to port ④ (pins DP, DM, GND, VBUS) of the processing module.
2. Connect the other end to the USB port of your computer or onboard AI system.
3. Open the video stream in your UVC-compatible software; MJPEG 640 × 512 is delivered.

IMAGE CONTROLS OVER UVC

Brightness, contrast and pseudo-colour (palette) can be adjusted dynamically through the Processing Unit (PU) controls defined by the UVC standard. The 1.0–4.0× stepless digital zoom is also controllable via UVC.

Setting	UVC control
Brightness	UVC_PU_BRIGHTNESS_CONTROL
Contrast	UVC_PU_CONTRAST_CONTROL
Pseudo-colour (palette)	UVC_PU_HUE_CONTROL

Output format	MJPEG
Resolution	640 × 512
Brightness / contrast range	0 – 100
Palettes	0 – 4
Digital zoom	1.0× – 4.0× stepless

ⓘ Ideal for onboard computers and AI modules performing detection or analysis while the pilot keeps the live HD feed.

06 · OSD MENU & IMAGE SETTINGS

OSD menu & image settings

The ADKEY and GND pins of the processing module accept an external keypad (OSD menu board). It gives access to the on-screen menu for image settings and lets you customize the text shown in the OSD on the video.



FIG. 5 — Connecting the OSD menu board to ADKEY / GND



FIG. 6 — On-screen menu (illustrative; values shown as an example)

USING THE MENU

1. Connect the OSD menu board to the ADKEY / GND port.
2. **Short-press the centre button** to open the OSD menu.
3. Use **UP / DOWN** to select a function and **LEFT / RIGHT** to change its value.
4. Select **SAVE & EXIT** to store the settings.
5. Remove the OSD menu board once you have finished.

Contrast	0 – 100
Brightness	0 – 100
Palette (pseudo-colour)	0 – 4
Flip (image rotation / mirroring)	Horizontal · vertical · diagonal
Style	Image style
Reset	Restore default settings

07 · GROUND UNIT SETUP (GT8 VERSION)

Switching the ground unit to race mode

⚠ **GT8 version:** when using the ThermaView 960 with the AeroLink GT8 VTX, the goggles / ground unit **must be set to race mode**. This step is not required for the PX version.

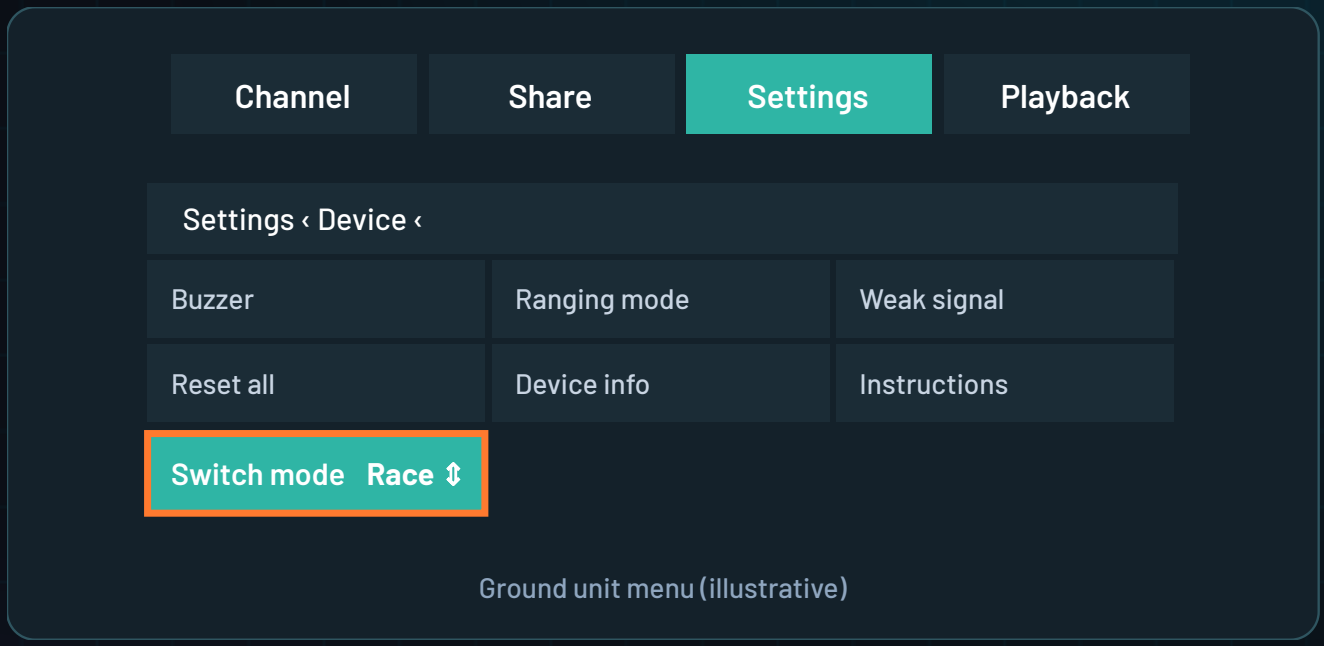


FIG. 7 — Ground unit menu: Settings › Device › Switch mode › Race

PROCEDURE

1. On the ground unit, press the **menu** key and open **Settings**.
2. Go to **Device** and locate **Switch mode**.
3. Select **Race** and save.

ⓘ Menu names and layout may differ slightly depending on the ground unit and its firmware version. Contact [BRAND] support if you cannot find the option.

08 · DIMENSIONS

Dimensions

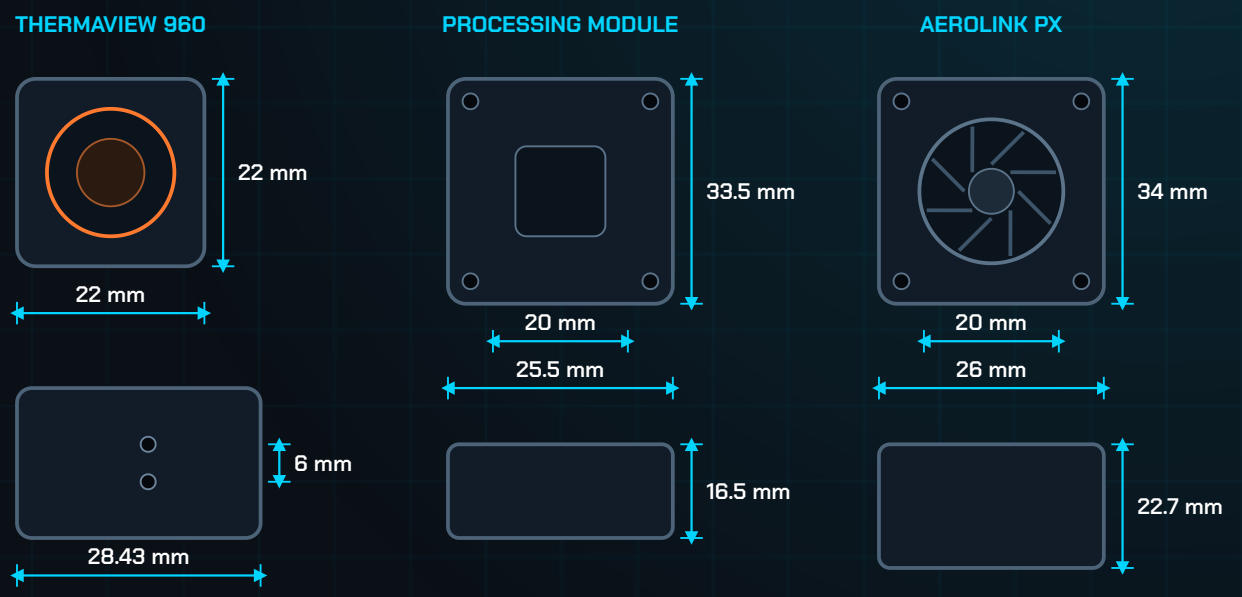


FIG. 8 — Dimensions of the ThermaView 960 camera, processing module and AeroLink PX (schematic, not to scale). Horizontal spacings under the module and the PX indicate the mounting pattern.

SIZE SUMMARY

Camera	22 × 22 × 28.43 mm
Processing module	33.5 × 33.5 × 16.5 mm
AeroLink PX	34 × 34 × 22.7 mm
AeroLink GT8 VTX	See the AeroLink GT8 System dossier



AeroLink PX — illustrative image

09 · TECHNICAL SPECIFICATIONS

Technical specifications

THERMAVIEW 960 CAMERA

Video resolution	960 × 768 (processed with 3rd-gen image enhancement)
Frame rate	50 Hz
Video output	HD digital link (GT8 or PX version) + USB UVC, simultaneous
UVC output	MJPEG 640 × 512
Optics	9.1 mm focal length · F1.0
Field of view	48.3° (H) × 38.6° (V)
Digital zoom	1.0× – 4.0× stepless (controlled via UVC)
Color palettes	5 selectable (0 – 4)
Brightness / contrast	Adjustable 0 – 100
Image mirroring	Horizontal · vertical · diagonal
Control	UVC · external ADKEY keypad (custom OSD)
Power input	4.5 – 20 V
Typical power consumption	< 1.5 W
Operating temperature	–20 °C to 50 °C
Camera dimensions	22 × 22 × 28.43 mm
Processing module dimensions	33.5 × 33.5 × 16.5 mm

AEROLINK PX TRANSMITTER

Frequency band	5.650 – 5.924 GHz
Transmit power (EIRP, 5.8 GHz)	FCC <30 dBm · CE <14 dBm · SRRC <20 dBm · MIC <25 dBm
Live image	1080p at 60 fps
Latency	35 ms average
Channels	3
Power input	11.1 – 25.2 V (reference consumption 12 V @ 1.5 A)
Connections	VCC · GND · UART RX/TX · SBUS · 2 × MMCX antenna connectors
OSD	Canvas mode
Dimensions	34 × 34 × 22.7 mm

ⓘ All figures are the manufacturer's published values and may change without notice.



Illustrative image

10 · LINK SPECIFICATIONS & SAFETY

Link specifications & safety

AEROLINK GT8 VTX (GT8 VERSION)

Frequency band	5.725 – 5.850 GHz
Transmit power (EIRP)	FCC <30 dBm, max. 33 dBm · CE <14 dBm · SRRC <20 dBm · MIC <25 dBm
Recording	1080p / 720p
Channels	8
Power input	11.1 – 25.2 V
OSD	Canvas mode
Latency	22 ms average
Antennas	2 (IPEX)

RADIO REGULATIONS

⚠ **European Union:** maximum permitted transmit power **CE <14 dBm EIRP** for both transmitters. Higher levels (FCC <30 dBm; max. 33 dBm on the GT8) are only for regions where they are legally permitted.

Declaration of conformity: [Insert CE declaration / certification details of [BRAND]]

SAFETY NOTES

1. Install the antennas on the transmitter before powering on.
2. Check that your power source can deliver the transmitter's reference consumption of 12 V @ 1.5 A.
3. Provide good airflow: the transmitters generate considerable heat during operation.
4. Operating temperature of the camera: –20 °C to 50 °C. Do not operate outside this range.
5. GT8 version: set the ground unit to race mode before flying.
6. If other 5.8 GHz equipment is in use nearby, choose a different channel.
7. Operate in accordance with local radio and drone regulations.

11 · TROUBLESHOOTING, WARRANTY & SUPPORT

Troubleshooting

SYMPTOM	WHAT TO CHECK
No thermal image in the goggles (GT8 version)	Make sure the ground unit is in race mode (section 07) and that the transmitter is bound and powered.
No image at all	Check the power supply of the module and transmitter, the camera-to-module cable and the control connection to the transmitter.
No video on the computer (UVC)	Check the UVC cable on port ④ and use software that supports UVC / MJPEG 640 × 512.
Image too dark, too bright or flat	Adjust brightness and contrast (0–100) in the OSD menu or via UVC; try another palette (0–4).
Image upside down or mirrored	Change the FLIP setting (horizontal / vertical / diagonal) in the OSD menu.
OSD menu does not open	Check the menu board connection to ADKEY / GND and short-press the centre button.
Settings not kept	Exit the menu through SAVE & EXIT before removing the menu board.
Transmitter overheating	Improve airflow around the transmitter.
Interference on the video link	Select a different channel if other 5.8 GHz equipment is nearby.

Warranty

[Warranty period and conditions of [BRAND] — e.g. duration, coverage, exclusions, how to make a claim]

TECHNICAL SUPPORT

Company	[Company name]
Phone	[Phone]
Email	[Email]
Web	[Web]

Specifications according to manufacturer data, subject to change without notice. Images and drawings are for illustration purposes only.



SUPPORT

We are here to help

Technical support, firmware files, spare parts and volume pricing for drone integrators and manufacturers.

SALES & TECHNICAL CONTACT

Company	[Company name]
Phone	[Phone]
Email	[Email]
Web	[Web]

[LOGO]