

CAMSIGHT SW



Sky Watcher OEM camera

- Dedicated to sky observation
- High precision absolute measurement
- High image quality
- 180° field of view for full sky observation
- Shutter for sun protection
- Ultra low SWaP (Size, Weight and Power)
- Design and manufactured in France, based on French components



CAMSIGHT® SW

ULTRA LOW SWaP SKY WATCHER RADIOMETRIC CAMERA

CamSight®SW is an Original Equipment Manufacturer (OEM) digital core camera developed and produced by Bertin Technologies, dedicated to sky observation. With its 180° field of view, it provides comprehensive temperature measurements in a minimalist SWaP (Size, Weight, and Power) configuration.

This ultra-compact, low-power camera can be seamlessly integrated into any complex measurement station, making it ideal for OEMs needing a ready-to-use solution for radiometric measurement.

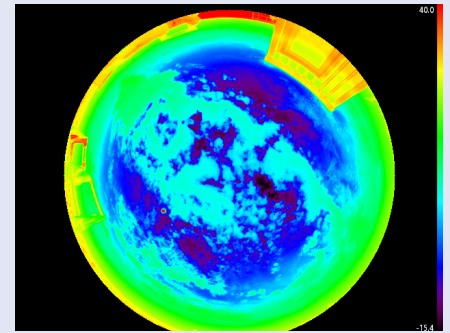
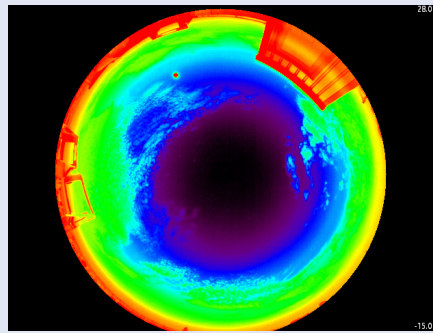
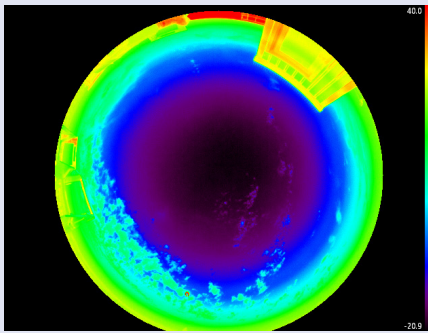
Equipped with an uncooled PICO LYNRED infrared sensor, CamSight®SW is designed

for high performance and reliability. Its unique features make it particularly suitable for applications requiring continuous sky measurements, such as optical communication with satellites and solar panel orientation.

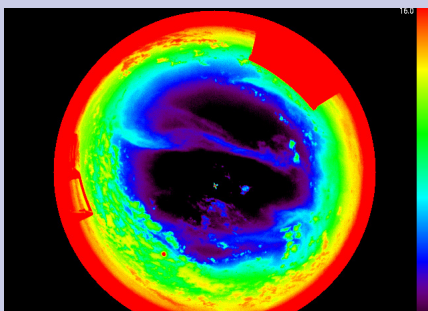
Advantages

- **180° Field of View:** Offers a wide-angle view in a compact SWaP configuration.
- **Integrated Design:** Eliminates the need for an external optical mirror; everything is built-in.
- **Sun Protection:** The shutter protects the sensor from the sunlight, ensuring optimal image quality.
- **High Precision:** Captures a burst of images for enhanced accuracy.

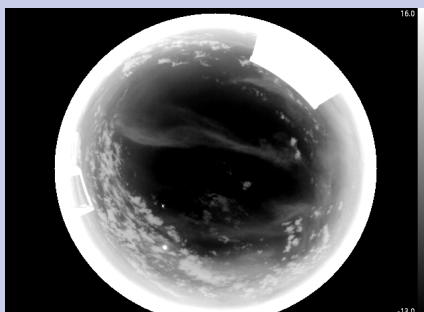
SEVERAL EXAMPLES OF HIGH-QUALITY INFRARED IMAGES OF THE SKY



SAME IMAGES WITH 2-SECOND INTERVALS AFTER APPLYING THE FALSE COLOR ALGORITHM.



Example of false color representation of the sky. In the middle, there is a plane. On bottom left, the sun in red.



Technical features

Resolution	640 x 480 @ 17µm
Bandwidth	LWIR (8-12µm)
FOV (°)	180 circular fisheye
Radiometric Range	-40°C to +40°C with ±5°C Precision
Sensitivity	NETD < 50mK @ f/1.0
Optics	2.6mm @ f/1.4
Data output	Temperature table
Precision	+/-5°C
Consumption	< 5W
Dimensions (mm)	71 x 61 x 55 (OEM Core)
Weight (g)	150g (OEM Core)