All-Sky Imager

ASC170



Applications

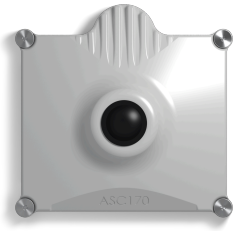
Automated cloud cover observation for meteorological and climate services; solar energy forecasting and photovoltaic performance evaluation; meteorological science, remote sensing and solar resource research; aviation and marine cloud observation; sunrise, sunset and ecological observation.

Key Features

- Single-channel visible-light observation; automatically captures and analyzes all-sky images at a set interval.
- Advanced visual remote sensing suppresses direct sunlight interference and records all-sky cloud distribution, weather phenomena and ecological information.
- Advanced image restoration suppresses solar halo and overexposure, reducing their effect on cloud cover observation.
- Embedded shutter-type sun shield; optional dust-free positive-pressure self-cleaning unit.
- Centralized web management; supports images, CSV records, and RS485 and FTP data access.

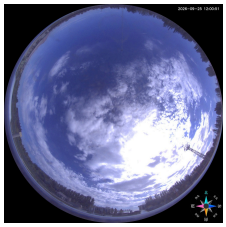
Design Advantages

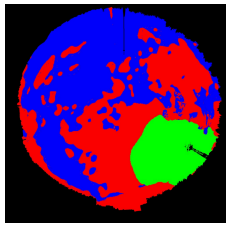
- Compact: 67 × 65 × 39 mm, only 400 g, palm-sized.
- Easy to install: a single aviation connector handles both power and communication.
- Easy to integrate: can be mounted on weather stations, civil aviation meteorological equipment and photovoltaic environmental monitoring boxes.
- Rugged: IP66 protection; operating temperature –50 °C to 70 °C.



Technical Parameters

Observation	Cloud cover, cloud type, solar elevation and azimuth
Observation band	Visible light
Field of view	180°
Cloud cover	Resolution 1%, accuracy ±15%, range 0–10 tenths
Image resolution	2592 × 2592
Sampling period	1–10 minutes
Software	Web configuration and status view; FTP file upload
Protection	IP66
Operating temperature	–50 °C to 70 °C
Interfaces	Ethernet, RS485 serial
Size and weight	67 × 65 × 39 mm, 400 g
Power supply	DC 12 V or DC 5 V







Anhui Yunnengtian Intelligent Technology Co., Ltd.

en.yunnengtian.com

+86 152 0569 2571

office@yunnengtian.com