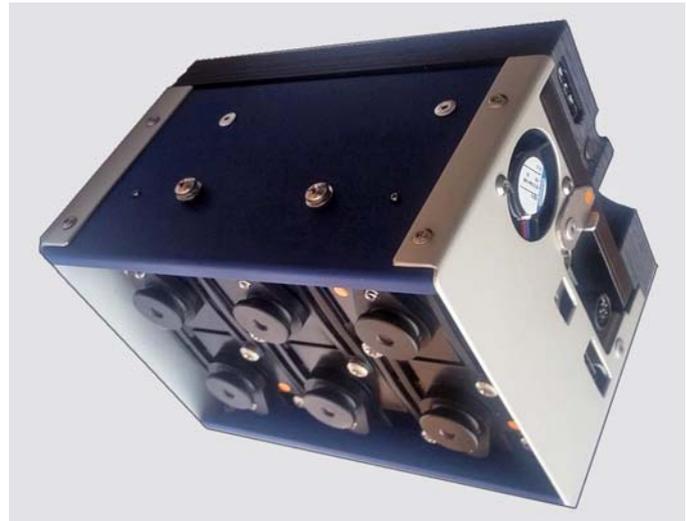




Macaw (MCAW) Tetracam's Multiple Camera Array Wireless System

The Tetracam MCA camera series has been popular for researchers for many years. The combination of lightweight, replaceable filters, in addition to ruggedness have led to its being the most widely cited instrument in multi-spectral vegetation studies. Over the years, Tetracam has introduced upgrades to the MCA electronics to keep performance competitive and provide new capabilities.

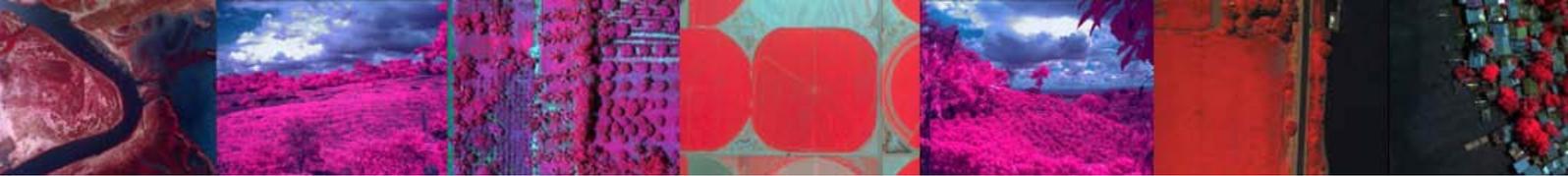


The Macaw (MCAW: Multiple Camera Array Wireless) is the latest variant of the MCA series. The Macaw upgrades the MCA electronics to a full-featured Linux computer system, with open source architecture, and a SATA solid state drive (SSD) for computation intensive missions. While images are being taken, the Macaw can align image planes and extract vegetation indices, such as NDVI. It can do this at approximately the rate that the images are acquired, thanks to its 2 GHz quad-core ARM CPU.

The Macaw comes equipped with two interfaces: A serial port Linux console interface that provides a hardwired control interface, and a wireless LAN interface that provides services for a variety of clients used by developers: http, ssh, and ftp.

In the field, the Macaw can be controlled from a tablet or smartphone via any commercial web browser. A control tablet computer is included with the product. Using the browser interface, images can be viewed and downloaded, and help documentation can be easily accessed. For fast data transfers, the SATA SSD is configured with an external USB3 controller interface that transfers the disk to desktop PC or laptop for USB3 transfer speed. The browser interface can also be used to show a live video feed from any selected camera in the array. An external ILS module with a 1 meter cable is included with new Macaw purchases for increased accuracy of pictures taken.





Technical Specifications

Imaging:

Six 1280 X 1024 Global Snap Shutter sensors with individual filtering.
All channels scaled, translated, and rotated to match the master channel
High sensitivity 5.2 micron pixels
One second capture cycle time
Images tagged with calibration / GPS metadata.

Image Capture

Image Capture Capacity:
Approx. 3 MB per image (DCM format), limited only by CF card size
From 2 to 5 seconds per picture, depending on file save mode selected

Lens:

9.6 mm fixed
f/3.2

Data Storage:

Up to 1 terabyte SATA SSD, 280GB standard.

Command/Control

Trigger Switch input
Auto trigger mode and GPS offset trigger mode (continuous capture).
External RS232 command interface.
External timing line for integration start.

Connectivity:

WiFi
USB 3.0
Ethernet

Power

800 ma at 12 volts, 9 to 15 volt input.

Host Interface

Single plug USB 3.0 controller.

Weight

600 g

Temperature:

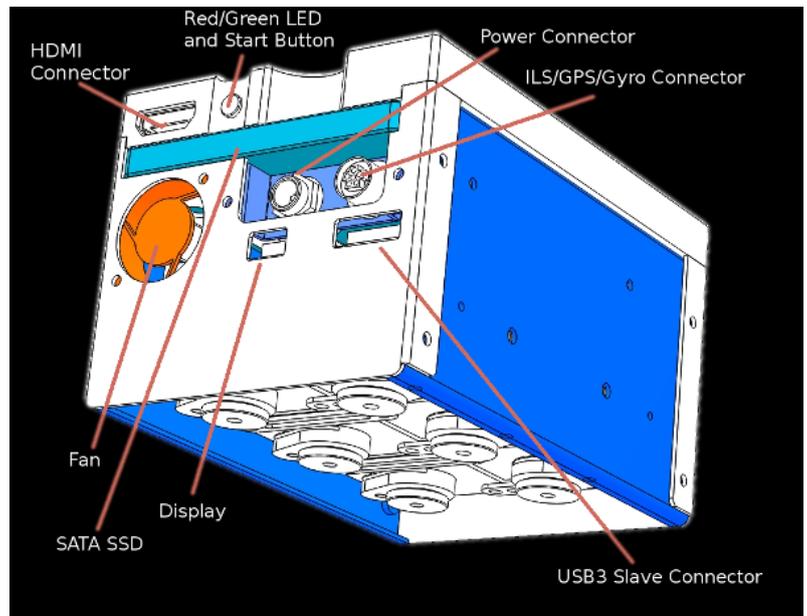
0 degrees Celsius to 40 degrees Celsius.

Humidity:

Less than 85% relative humidity, noncondensing.

System Includes

- PixelWrench for Macaw
- Icaros OneButton mosaic stitcherProduct and Accessory Documentation



VISION ASIA TECHNOLOGY PTE LTD
7 GAMBAS CRESCENT #09-08
ARK @ GAMBAS
SINGAPORE 757087
PHONE: +65-6451-1857
WWW.VISIONASIA.COM.SG