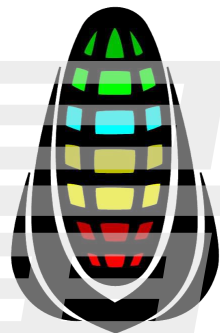


M A P I R[®]



Kernel2 Array Cameras

Kernel2 Array Cameras

Each array includes multiple camera modules connected to an array base.

The array base provides simultaneous image capture, signal distribution and high-capacity media storage.



MODULE = CPU + SENSOR + LENS + FILTER

上海昊量光电设备有限公司 Phone: 4006-888-532 WeChat: Auniontech Website: www.auniontech.com E-mail: info@auniontech.com

Kernel2 Array Cameras

Choose From:

2 Sensors

5 Lenses

32 Filters

- User Interchangeable Array Modules
- 2, 4, 6 Module Array Bases Available
- Scientific-level Reflectance Measurements
- Simultaneous Module-to-Module Image Capture
- Location (GPS+BARO) & Position (IMU) Metadata
- Large Internal FTP (TCP/IP) Media Storage Capacity
- Open Architecture for Easier System Integration
- Open API Camera Control (PWM, MAVLink, TCP/IP)

Kernel2 Array Modules

Modules can be configured with various **sensor, lens and filter** combinations and are compatible with all array bases.

Users can quickly exchange one module for another and the entire camera array will automatically reconfigure upon reboot.

Modules we introduce in the future allow a user to quickly upgrade and augment their arrays to meet each particular project's requirements.



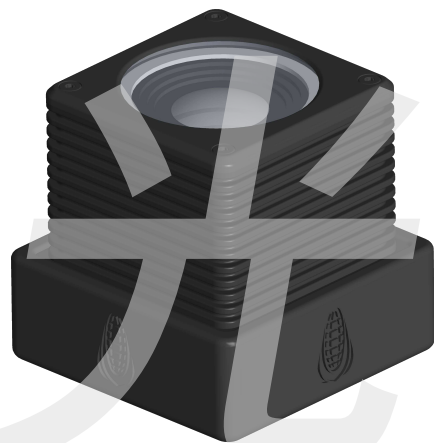
Kernel2 Array Modules



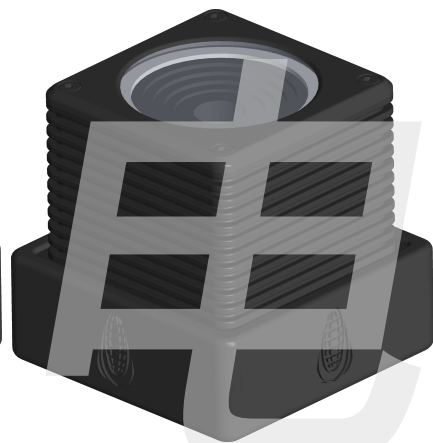
3.2MP Global Shutter
Sensor Size: 1/1.8"
Sensor Type: MONO
Lens: 3.5mm 87°HFOV
Filter: 27 Options



3.2MP Global Shutter
Sensor Size: 1/1.8"
Sensor Type: MONO
Lens: 9.6mm 41°HFOV
Filter: 27 Options

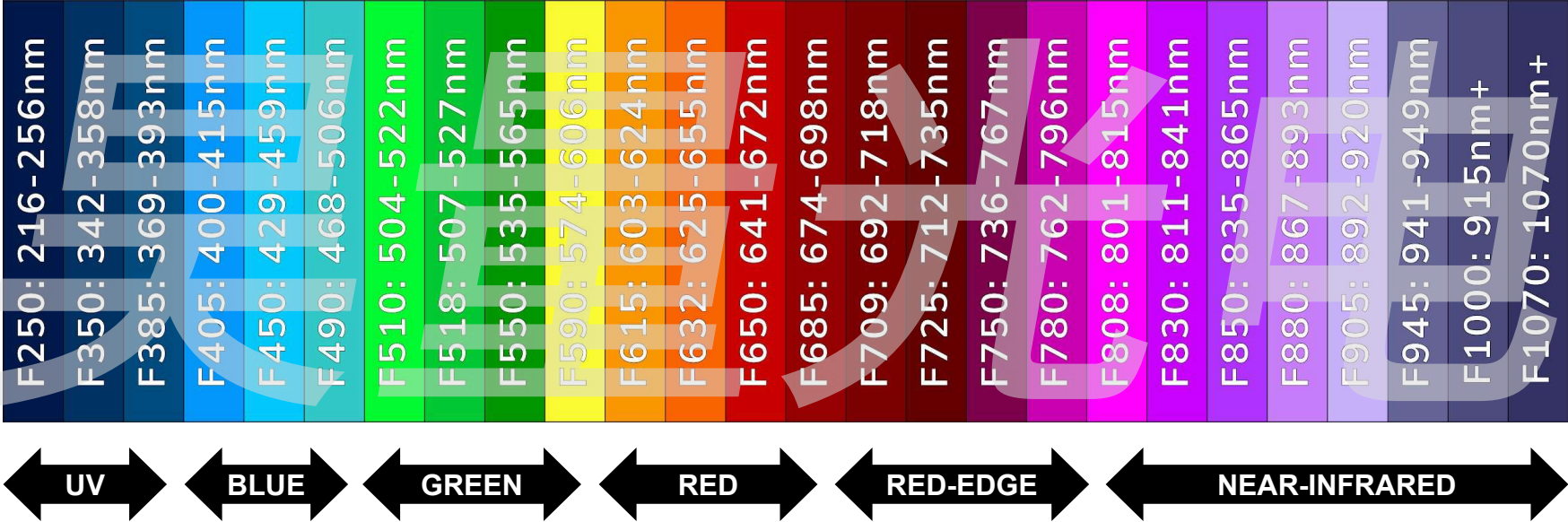


14.4MP Rolling Shutter
Sensor Size: 1/2.3"
Sensor Type: RGB
Lens: 3.37mm 87°HFOV
Filter: 5 Options



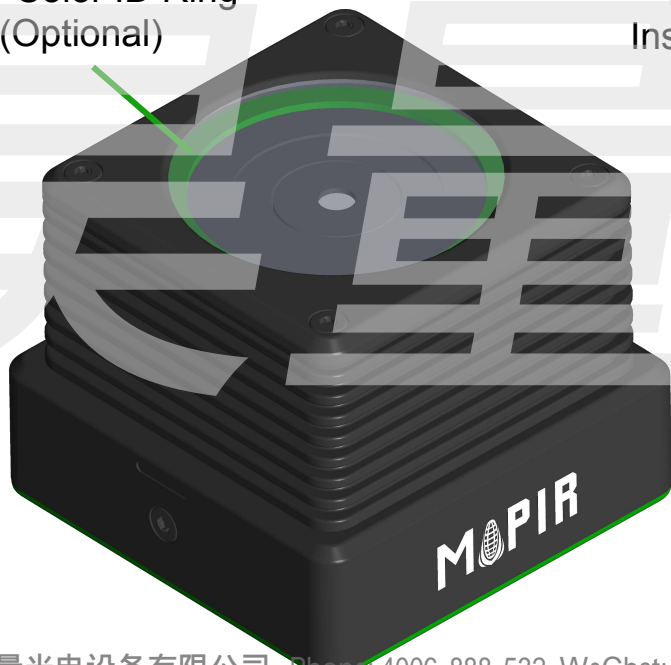
14.4MP Rolling Shutter
Sensor Size: 1/2.3"
Sensor Type: RGB
Lens: 3.37mm 41°HFOV
Filter: 5 Options

Kernel2 Filters - MONO Sensor Modules

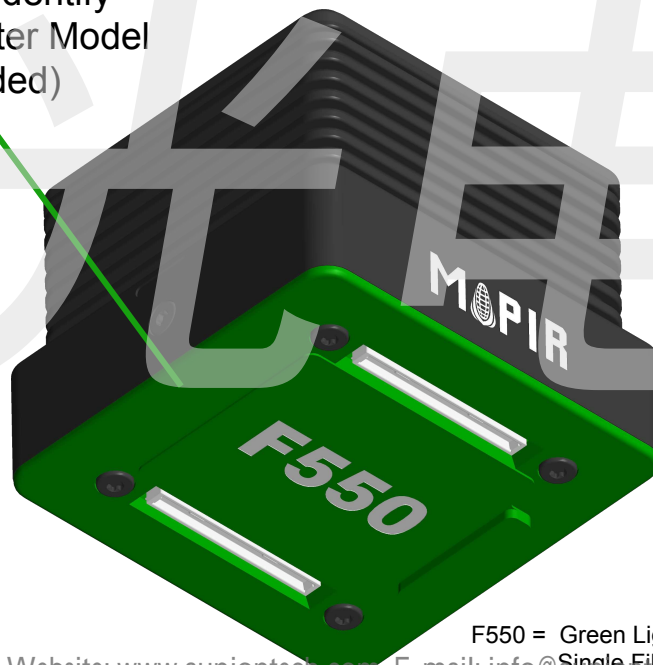


Kernel2 Array Modules

User Customizable
Multi-Color ID Ring
(Optional)

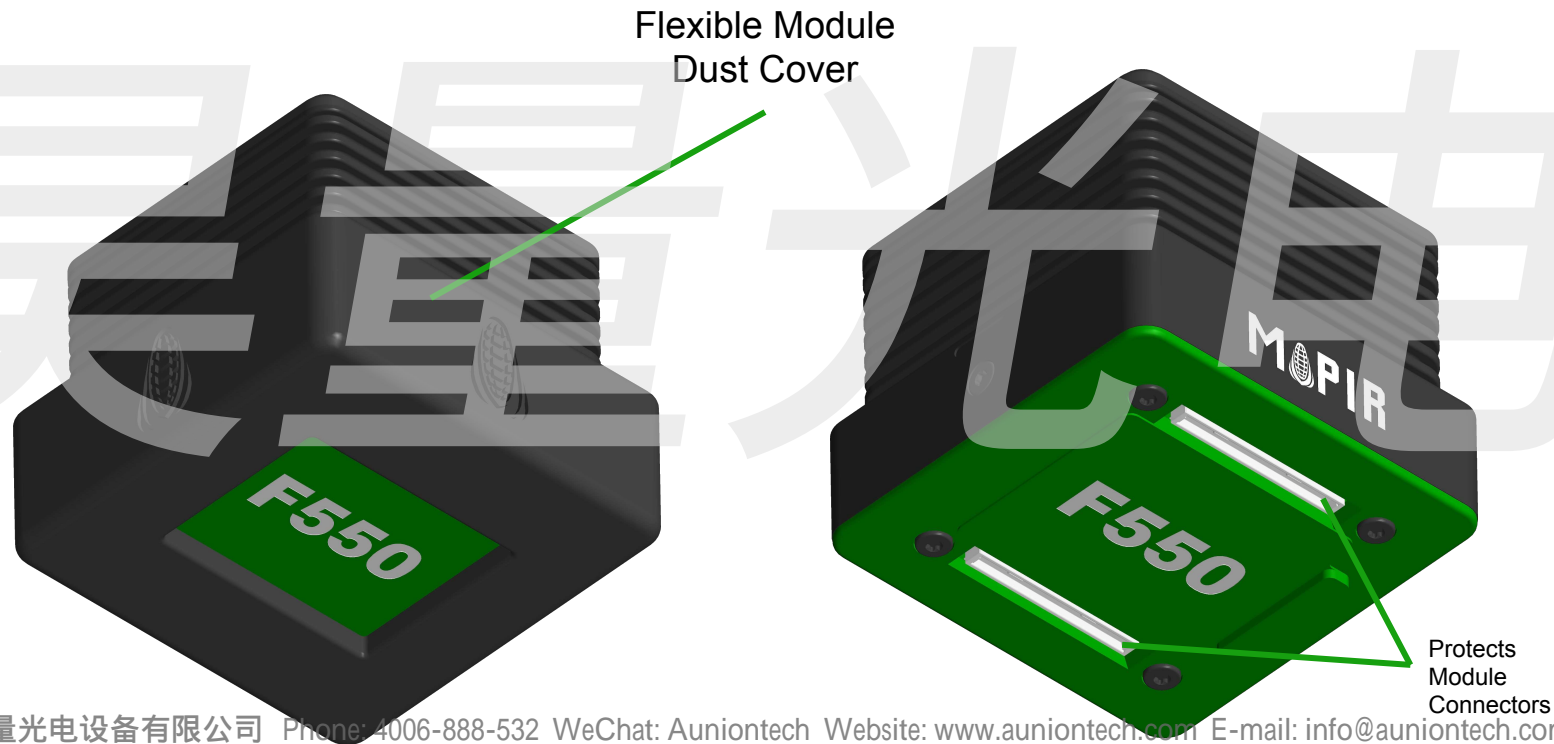


Multi-Color Module
Bottoms Identify
Installed Filter Model
(Included)



F550 = Green Light (550nm)
Single Filter Installed

Kernel2 Array Modules



Kernel2 Array Bases

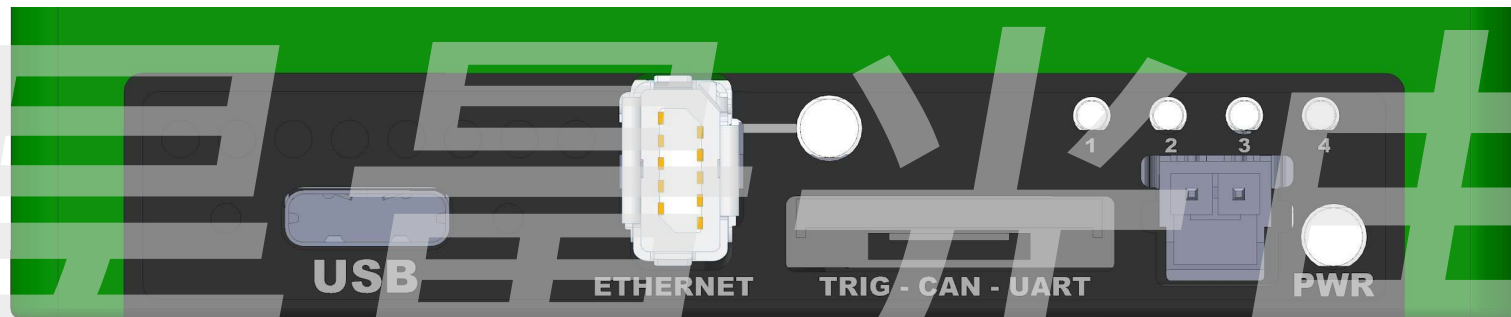
- Large Internal Storage for Hours of Capturing
- Ethernet-IX/USB-C Media Extraction
- Remote (TCP/IP) File Access and Management
- External GPS Metadata (MAVLink, UAVCAN)
- Dual-Frequency IMU Improves Position Metadata
- Barometer for Accurate Altitude Metadata
- Exposure Strobe Pulse for PPK Corrections
- Large Input Voltage Support: 9-38V (3S-8S)
- Internal Buzzer ON/OFF for Image Capture
- Simultaneous Live Streaming 1080p Video (TCP/IP) From Every Module

Array Base Storage Options

Total K6 Array Storage	Module Storage
384GB	64GB
768GB	128GB
1536GB	256GB
3072GB	512GB

Module Type	RAW Image Size
MONO 3.2MP	4.6MB
RGB 14.4MP	21.2MB

Kernel2 Array Bases



USB-C

TCP/IP

- Settings
- FTP
- 1080p

ETHERNET-IX

TCP/IP

- Settings
- FTP
- 1080p

DATA-JST

PWM TRIGGER

STROBE (PPK)

CAN (UAVCAN)

UART, I2C

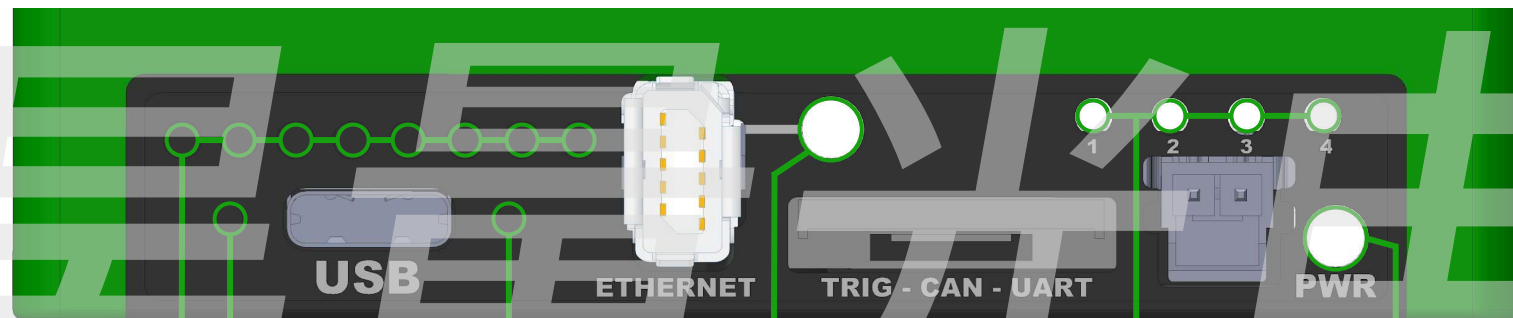
POWER OUT (5V)

POWER

9-38V (3S-8S)

Input

Kernel2 Array Bases



User
Pen Mark
Region (8)

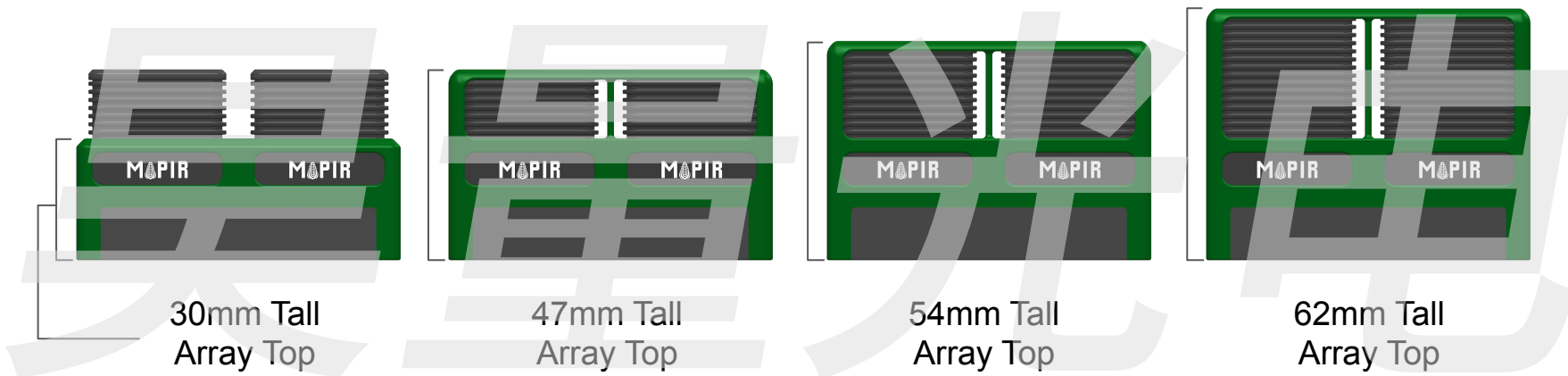
USB-C
Cable
Locks

Ethernet
Activity
LED

Array
Activity
LED (4)

Power
Status
LED

Kernel2 Array Cameras



Custom Color Array Tops
Accommodate Various Module Sizes

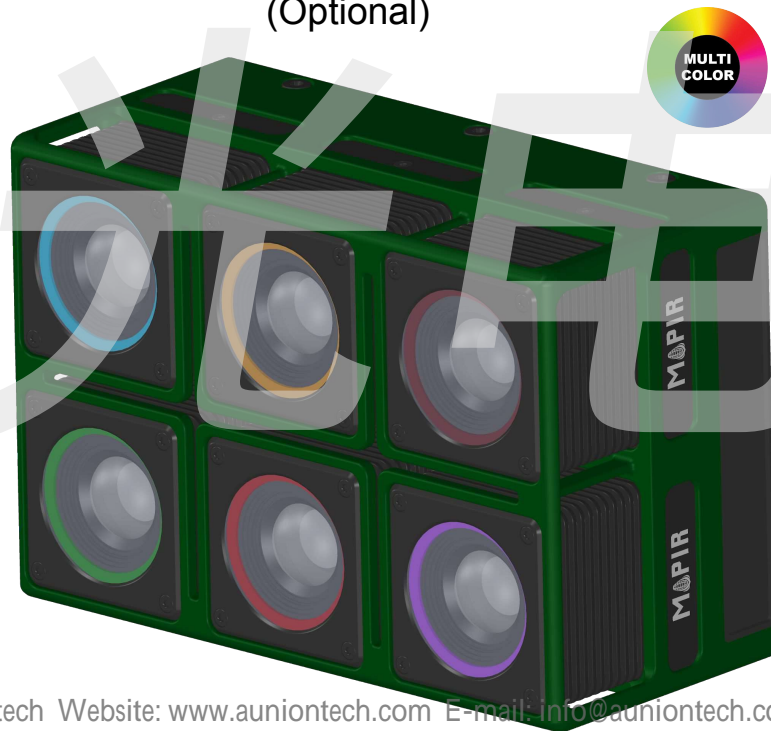


Kernel2 Array Cameras

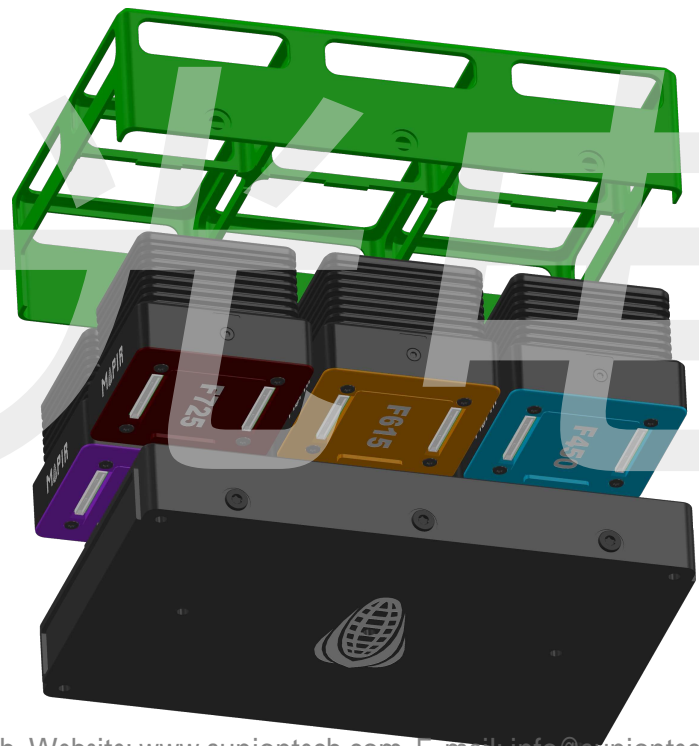
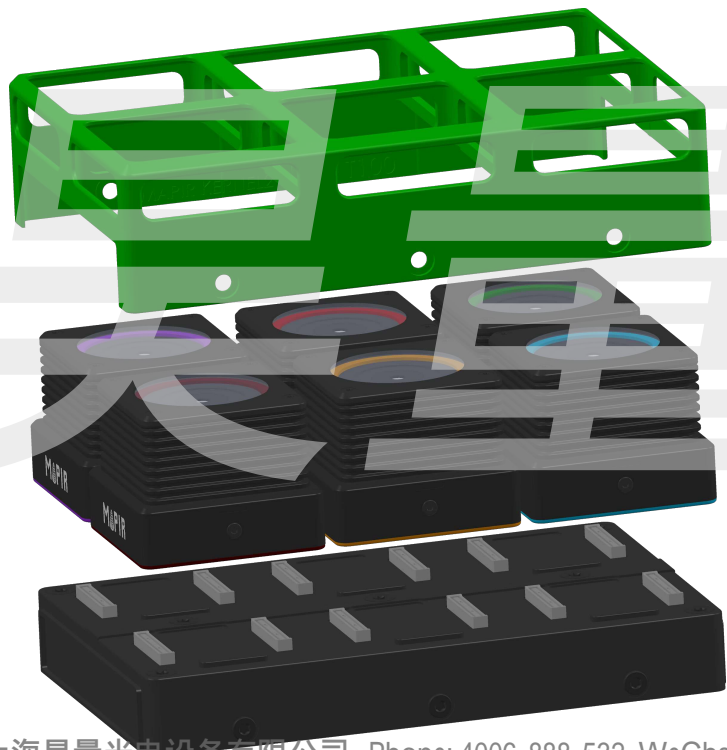
All Black Color Components
(Default)



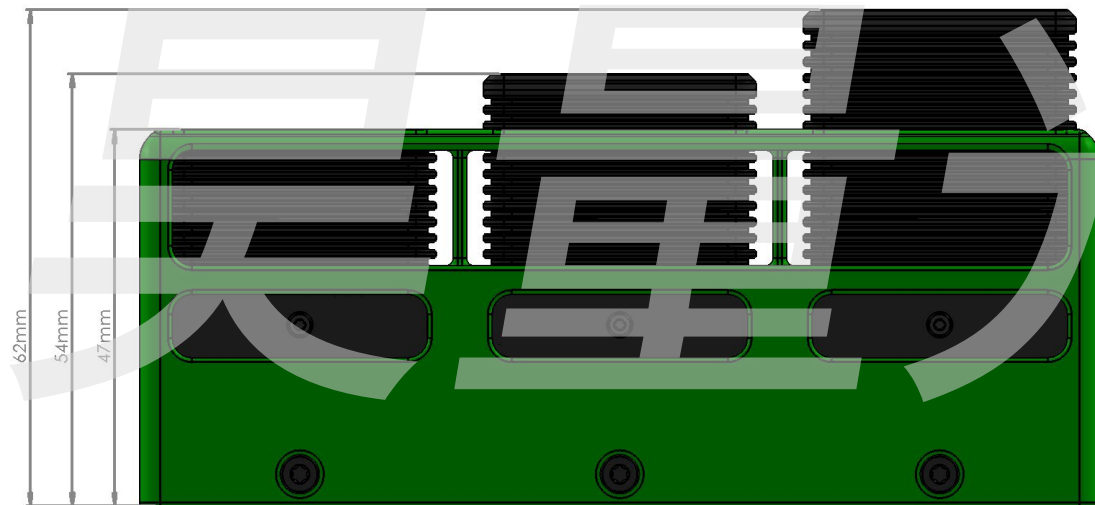
Custom Multi-Color Components
(Optional)



Kernel2 Array Cameras



Kernel2 Array Cameras



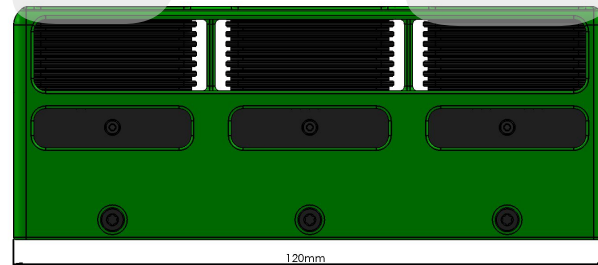
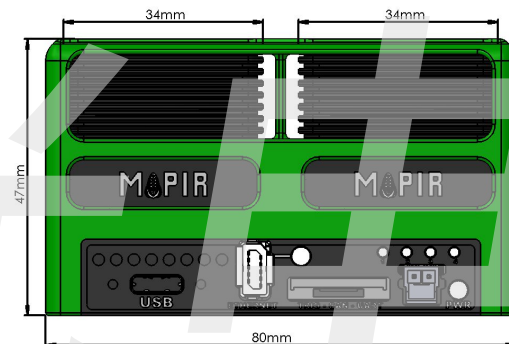
9.60mm Lens

3.37mm Lens

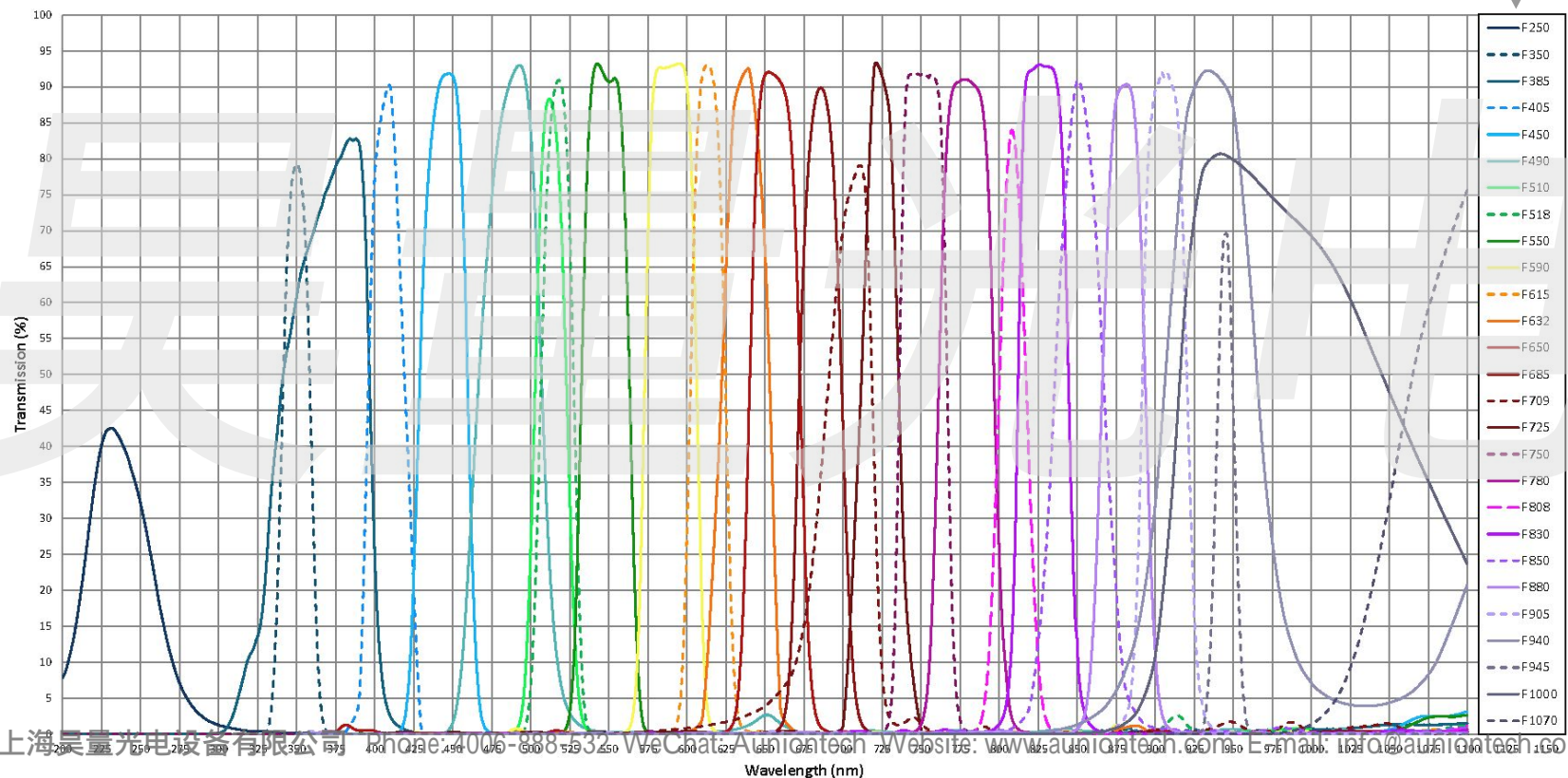
8.25mm [PRO] Lens

3.50mm Lens

8.25mm Lens



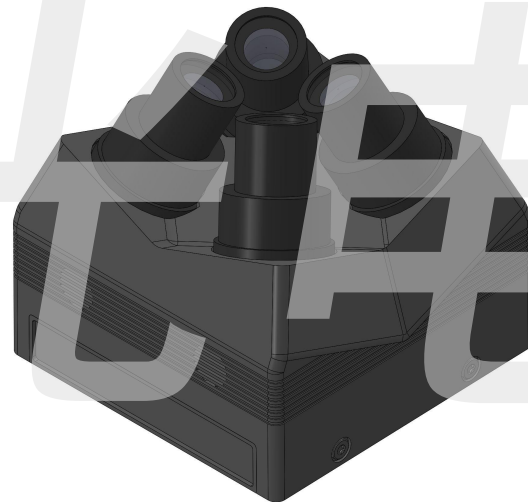
Kernel2 Filters - 27 Single-Band Options



Kernel2 Array Cameras



Linear Arrays



Curved/Oblique Arrays
(Coming Soon)



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