

Payload & Imaging

◆ Design Considerations

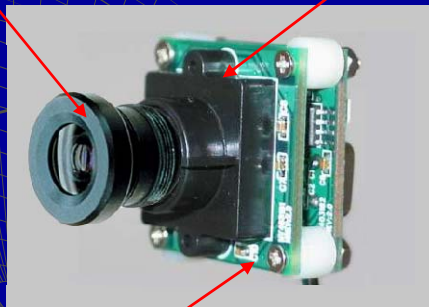
- Visible and NIR bands
- At least 1m resolution
- Coverage of whole Temple Campus

(from the Baseline Requirements)

Lens

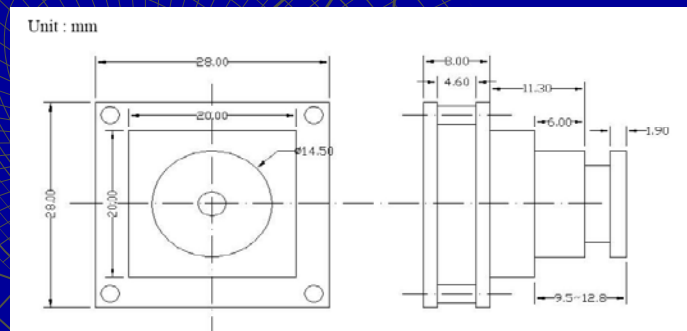
Lens
mounting
base

PCB board



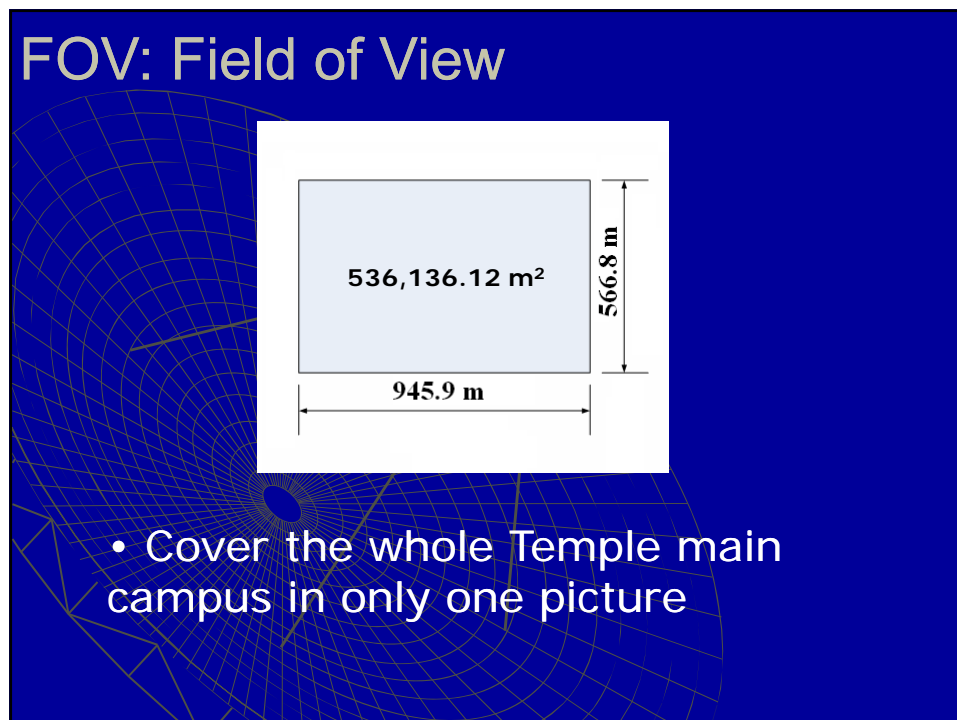
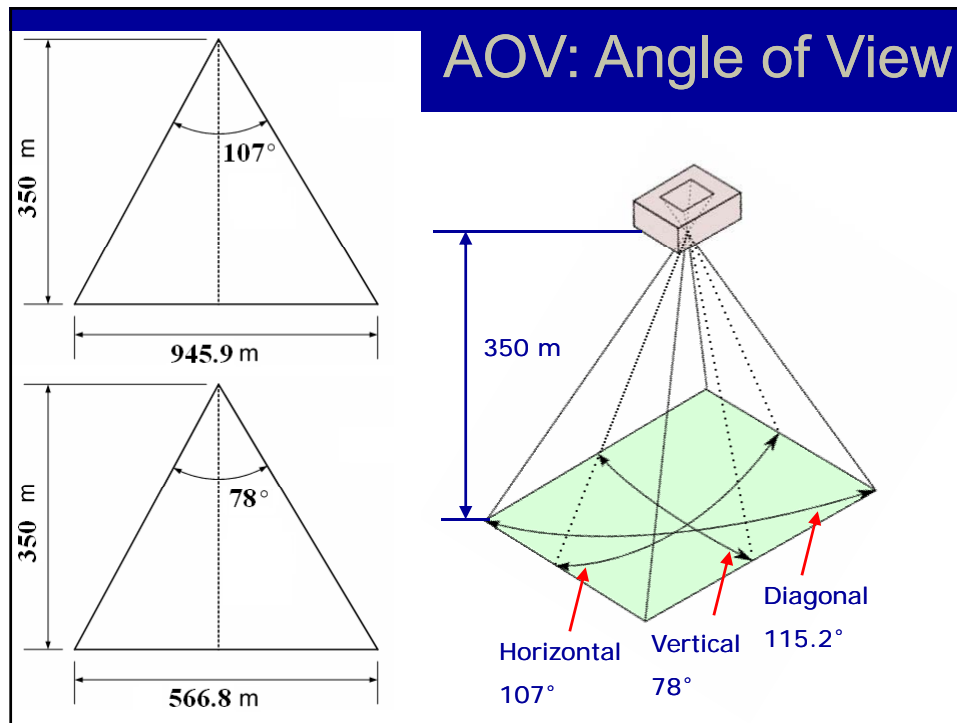
Features:

- Small in size.
- Low-cost \$149.00
- Low-power 5.0V 200mA
- USB 2.0
- 1280 × 1024 array
- 1.3 Mega pixel
- CCD level quality sensor support visible, Infrared



Specifications

- ◆ Size: 28 x 28 x 32 mm
- ◆ Lens: F2.0, f1.9mm
- ◆ Operation voltage: 5.0V, 200mA
(USB bus power)
- ◆ Pixels: 1280 x 1024
- ◆ Mass: 150 g
- ◆ FOV: Horizontal 107° Vertical 78°
- ◆ Spectral Response: 400 ~ 1000 nm



Resolution (require $< 1\text{ m}$)

- If altitude $\leq 350\text{ m}$
Resolution $\leq 0.96\text{ m}$

- If altitude $> 350\text{ m}$
Resolution $> 0.96\text{ m}$

