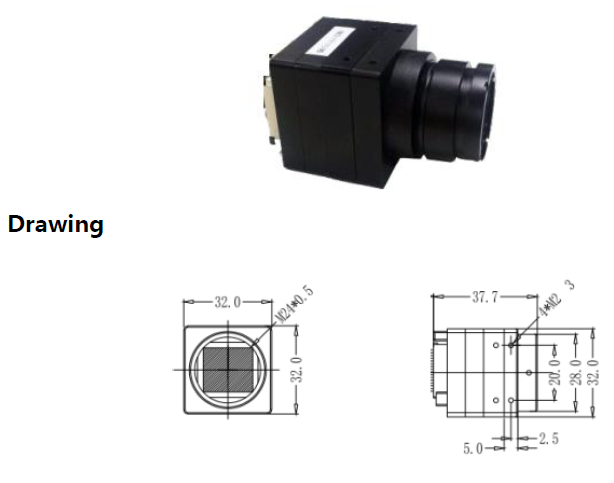
**OBSETECH XU-Core**

Small and reliable uncooled LWIR shutterless thermal imaging core with excellent vibration resistance designed for multiple integrations: UAVs, UGVs, weapon sights, handheld and other systems. XU-Core supports USB 2.0/3.0 raw data output.

|  |  |
| --- | --- |
| **Detector** | |
| **Type** | Uncooled FPA Microbolometer (Ulis) |
| **Pixel resolution** | 640×480 |
| **Pixel pitch** | 17μm |
| **Spectral Range** | 8～14μm |
| **NETD** | ≤65mk@30℃ |
| **Image** | |
| **Frame rate** | 25Hz or 50Hz |
| **Noise reduction** | Digital filtering |
| **Digital zoom** | 2x, 4x, 8x / Smooth zoom |
| **Polarity reversal** | Available |
| **Image flip** | Horizontal, Vertical, 180° Flip |
| **Startup** | ≦3s |
| **NUC** | NBT shutterless technology, Digital calibration |
| **Display** | |
| **Video output** | CVBS 50Hz（PAL）/ 60Hz（NTSC） |
| **Palette** | 12 palettes |
| **Gain/Brightness adjustment** | Auto / Manual |
| **Interface** | |
| **Serial port** | 3.3V TTL |
| **Analogue video** | 1 port |
| **Digital video** | BT656 |
| **USB** | Output RAW, YUV and command, support UVC/CDC |
| **Power** | |
| **Operating voltage** | 5.0 - 12.0 VDC |
| **Power consumption** | ≦2.0 W |
| **Environment** | |
| **Operating temperature** | -40℃～+65℃ |
| **Storage temperature** | -50℃～+85℃ |
| **Humidity** | 5-95% non-condensing |
| **Axial shock level** | Axial：100g/6ms，GJB 150-18 |
| **Lateral shock level** | Lateral：40g/11ms，GJB 150-18 |
| **Vibration** | GJB 150-16 2.3.1 |
| **Physical Characteristic** | |
| **Dimension** | 32mm x 32mm x 41mm (W x H x L)（without lens） |
| **Weight** | ＜65g（without lens） |



**Pin Definition**

