# FIRA VISION

# IM600-B
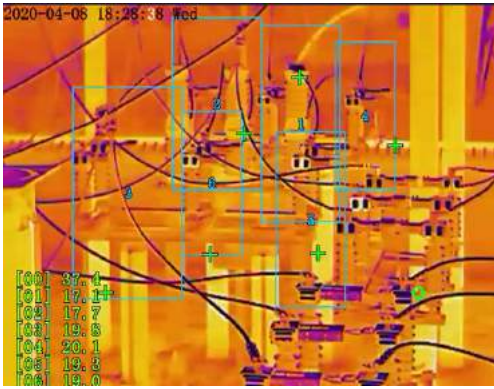# Bi Spectrum Thermal Camera

- 640×512resolution IR detector

- IP66 rated for use in harsh environments

- Intelligent software supports industrial temperature monitoring using spot, line and area measurement tools

- A high resolution Sony visual camera gives crisp digital images

## SPECIFICATION

| Models | IM600-B | | |
|---|---|---|---|
| **Thermal Module** | | | |
| Detector Type | Uncooled VOx Focal Plane Arrays 640×512 | | |
| Resolution | Sensor is 640×512,Image can be scaled up to 1280×1024 | | |
| Pixel Pitch | 12 µm | | |
| NETD | ≤40 mK | | |
| Spectral Range | 8~14 µm | | |
| Image Setting | Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR | | |
| Pseudo-color Setting | White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes | | |
| **Thermal Lens** | | | |
| Focus Control | Fixed Focus, Free Focus | | |
| Focal Length | 9mm | 15mm | 25mm |
| Aperture | F1.0 | F1.0 | F1.0 |
| Angle of View | H: 48°, V:38° | H:32°, V:26° | H:17°, V:14° |
| Detection Distance (Human:1.8×0.5m) | 375m | 624m | 1042m |
| Detection Distance (Vehicle: 4×1.5m) | 1150m | 1917m | 3194m |
| Recognition Distance (Human:1.8×0.5m) | 94m | 156m | 3194m |
| Recognition Distance (Vehicle:4×1.5m) | 288m | 479m | 799m |
| Identification Distance (Human: 1.8*0.5m) | 47m | 78m | 130m |
| Identification Distance (Vehicle: 4*1.5m) | 144m | 240m | 399m |
| **Optical Module** | | | |
| Image Senso | 1/2.8" Sony CMOS | | |
| Effective Resolution | 2592 (H)×1520 (V) | | |
| Shutter Speed | 1/5 ~ 1/20,000s | | |
| Min. Illumination | Color: 0.01 Lux @ (F1.2, AGC ON), B/W: 0.001 Lux | | |
| WDR | True WDR | | |
| Focal Length | 5.3 ~ 159 mm, 30X optical zoom | | |
| Max Aperture | F1.6 ~ F4.3 | | |
| Angle of View | H:55° ~ 2.3°, H: 41.6° ~ 1.7° | | |
| Digital Zoom | 16x | | |
| Focus Control | Auto/Manual/Semi-automatic | | |
| Mirror | Support | | |
| Defog | Support | | |
| Privacy Masking | Support | | |
| Illumination Distance | Up to 30m (98.4 ft, White) | | |

**INDUSTRIAL MAINTAINENCE**

| PTZ | |
|---|---|
| Pan/Tilt Range | Pan: 0° ~ 360° endless, Tilt: +90° ~ -90° |
| Pan/Tilt Speed | Pan: 0.01° ~ 30°/s, Tilt: 0.01° ~ 10°/s |
| Wiper | Support |
| Preset Accuracy | ± 0.1° |
| Presets | 400 |
| Scan | 8 scans, up to 32 presets per scan |
| Patrol | 12 patrols, up to 32 presets per scan |
| Track | 6 tracks |
| 3D Positioning | Support |
| Speed Setup | Auto/Manual (0-8) |
| Power Off Memory | Support |
| Idle Motion | It can activate Preset/ Scan/Tour/Pattern if there is no command in the specified period |

| Video and Audio | |
|---|---|
| Main Stream | Thermal: 1280×1024, 1280×720, 640×512 @ 25/30fps<br>Optical: 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps |
| Sub Stream | Thermal: D1, CIF @ 25/30fps<br>Optical: D1, VGA, 640×360, CIF, QCIF, QVGA @25/30fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | Thermal: Main stream: 100Kbps~8Mbps,Sub stream: 100Kbps~6Mbps<br>Optical: Main stream: 100Kbps~12Mbps, Sub stream: 100Kbps~6Mbps |
| Region of Interest | Off/On (8 Zone, Rectangle) |
| Audio Compression | G.711 (8kbps), RAW_PCM (16kbps) |

| Smart Function | |
|---|---|
| Smart Alarm | Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm |
| Smart Detection | Support human/vehicle detection, fire point detection, smoke and fire detection |
| Intelligent Analysis | Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area Support alarm triggering by specified target types (human and vehicle), People Counting |

| Temperature Detection | |
|---|---|
| Temperature Detection | 3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line). |
| Temperature Alarm | Over temperature alarm, Temperature difference alarm |
| Accuracy | ±2℃ / ±2% |
| Response Time | ≤ 30ms |
| Temperature Range | -20°C to 150°C (-4°F to 302°F),<br>-20℃ to 550℃ (-4°F to 1022°F) Optional |

| Network | |
|---|---|
| Protocols | IPv4/IPv6, RTSP/RTP/RTCP, TCP/UDP, HTTP, DHCP, DNS, FTP, DDNS, PPPOE, SMTP, 802.1x |
| Interoperability | ONVIF, CGI, SDK |
| Max. User Access | 10 Users |
| Web Viewer | <Ie11, Chrome, Firefox, Microsoft Edge |
| Web Language | English, Chinese, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian |

| Interface | |
|---|---|
| Network Interface | 2 Ethernet (10/100 Base-T) RJ-45 Connector |
| Audio Interface | 1ch input, 1ch output |
| Alarm Interface | 1ch output |
| Rs485 | Support |
| CVBS Interface | 1ch output |
| Reset Button | Support (Built-in) |
| SD Card Slot | Built-in, up to 256GB |

| General | |
|---|---|
| Power Supply | DC24V |
| Power Consumption | Max 40 W |
| Working Temperature | -30℃ ~ 60℃(-22°F ~ 140°F) |
| Storage Conditions | 0~ 90% RH |
| Certifications | CE/FCC |
| Ingress Protection | IP66 |
| Casing | Metal |
| Dimensions | 323 ×192.5 ×177 mm (12.71 × 7.58 × 6.97 inch) |
| Net Weight | 5 kg (11.0 lb) |