

## PSD-Series

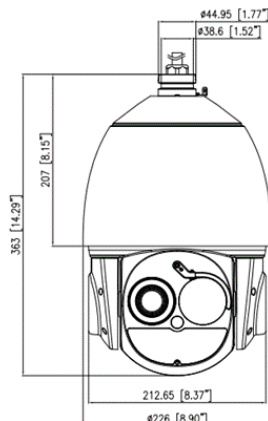
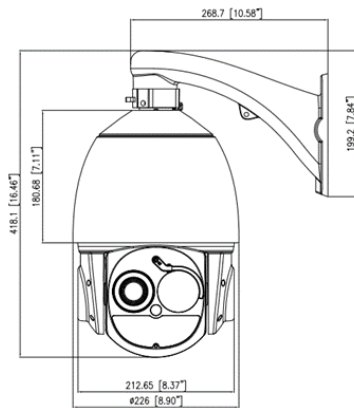
### Thermal & Optical Bi-spectrum Network Speed Dome Camera



SATIR are pleased to announce the release of the PSD-Series, a range of thermal and optical Bi-spectrum Network cameras. In the Series, there is the PSD-400 and the PSD-640. The PSD-400 has an 384x288 IR resolution while the PSD-640 has 640x512 IR resolution.

The PSD-Series has a temperature measurement range of -20°C to 150°C and a number of measurement tools. They are able to detect humans, vehicles and fire. They have a range of smart event tools such as people counting, people leaving/entering an area.

The CK-Pro Series in a new range of thermal & optical Bi-spectrum Network Cameras that will be beneficial to the industry.



### Key Features

- 384x288/640x512 IR resolution
- NETD ≤ 40Mk/35mK
- 25mm motorized focus thermal lens, 40x optical zoom lens
- Detects Humans/Vehicles/Fire/Smoke
- Smart Events tools include people counting and smart motion detection
- 3 Temperature Measurement Rule Types
- IP66

# PSD-Series Specifications

Thermal Module	PSD-400	PSD-640
Image Sensor	Uncooled VOx Focal Plane Arrays	
Resolution	Sensor is 384×288. Image can be scaled up to 1280×720	Sensor is 640×512. Image can be scaled up to 1920×1080
Pixel Pitch	12um	
Spectral Range	8~14um	
Thermal Sensitivity (NETD)	≤ 40mK	
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR	
Pseudo-colour Setting	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes	
Thermal Lens		
Focus Control	Motorized Focus	
Focal Length	25mm	
Aperture	F1.0	
Angle of View	H: 10.5°, V: 7.9°	H: 17°, V:14°
Detection Distance (Fire: 1x1m)	1,042m (3,418.6ft)	
Detection Distance (Human:1.8x0.5m)	1,040m (3,412.0ft)	
Detection Distance (Vehicle: 4x1.5m)	3,194m (10,479.0ft)	
Recognition Distance (Human: 1.8x0.5m)	260m (853.0ft)	
Recognition Distance (Vehicle: 4x1.5m)	799m (2621.4ft)	
Note: The detection ranges are calculated with Johnson's criteria and vary in different weather conditions. *Product performance is based on testing in a controlled environment. Your results may vary due to several external and environmental factors.		
Optical Module		
Image Sensor	1/1.8" CMOS	
Max. Resolution	2688 (H)×1520 (V), 4MP	
Shutter Speed	1/5 ~ 1/20,000s	
Min. Illumination	Color: 0.001 Lux @ (F1.5, AGC ON), B/W: 0.0001 Lux (F1.5, AGC ON), 0 Lux with IR	
WDR	True WDR	
Focal Length	6.27 to 251mm, 40x optical zoom	
Aperture	F1.5 to F4.8	
Angle of View	H: 60.7° to 2.33°, V: 36.8° to 1.38°	
Optical Zoom	16x	
Focus Control	Auto/Manual/Semi-automatic	Auto/Manual
Mirror	Support	
Defog	Support	
Privacy Masking	Support	

Please be aware specifications can vary from time to time

## PSD-Series Specifications

PTZ	PSD-400	PSD-640
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -10° to 90°	
Pan/Tilt Speed	Pan: 0.01° to 300°/s, preset speed: 300°/s	
Wiper	Tilt: 0.01° to 240°/s, preset speed: 240°/s	
Preset Accuracy	Support	
Presets	≤ 0.2°	
Scan	400	
Patrol	12 scans	
Track	12 patrols, up to 32 presets per patrol	
3D Positioning	6 tracks	
Speed Setup	Support	
Power Off Memory	Auto/Manual (0-8)	
Idle Motion	Support	
<b>Illuminator</b>		
Illuminator Type	IR	
Illumination Distance	Up to 300m (984.25ft)	
Illumination Intensity And Angle	Automatically adjusted	
<b>Video and Audio</b>		
Main Stream	Thermal: 1280×720, 704×576, 384×288 @ 25fps Optical: 2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps	Thermal: 1920×1080, 1280×1024, 1280×720, 640×512 @25fps Optical: 2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps
Sub Stream	Thermal: 704×576, 384×288, 352×240 @ 25fps Optical: D1, VGA @25/30fps	Thermal: D1, VGA, 640×512, CIF @25/30fps Optical: D1, VGA @25/30fps
Bit Rate Control	CBR/VBR	
Bit Rate	Thermal: Main stream: 100Kbps to 8Mbps Sub stream: 100Kbps to 6Mbps Optical: Main stream: 100Kbps to 16Mbps, Sub stream: 100Kbps to 6Mbps	Thermal: Main stream: 100Kbps to 12Mbps Sub stream: 100Kbps to 6Mbps Optical: Main stream: 100Kbps to 16Mbps, Sub stream: 100Kbps to 6Mbps
Region of Interest	Off/On (8 Zone, Rectangle)	
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps	
<b>Smart Function</b>		
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm	
Smart Detection	Support human/vehicle detection, fire point detection, smoking detection and smoke & fire detection	Support human/vehicle detection, ship detection, fire point detection, smoking detection and smoke & fire detection
Intelligent Analysis	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area and Smart motion detection (these functions support accurate detection of human/vehicles)	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area (these 7 function support accurate detection of people/ vehicles)
People Counting	Support	

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# PSD-Series Specifications

Temperature Detection	PSD-400	PSD-640
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°C/±2%	
Response Time	≤ 30ms	
Temperature Range	-20°C to 150°C (-4°F to 302°F)	-20°C to 150°C (-4°F to 302°F) or 0°C to 550°C (32°F to 1022°F)
Network		
Protocols	IPv4/IPv6, HTTP, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, DDNS, PPPoE, UPNP, ICMP, IGMP, FTP, NTP, SMTP, 802.1x, SNMP	IPv4/IPv6, HTTP, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, 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	1 Ethernet (10/100 Base-T) RJ-45 Connector	
Audio Interface	1ch Audio In, 1ch Audio Out	
Alarm Interface	7ch Alarm In, 2ch Alarm Out	
RS485	Support	
BNC Output	Support	
SD Card Slot	Built-in, up to 256GB	
General		
Power Supply	24VAC/36VDC/PoE++ (802.3bt)	
Power Consumption	Max 45 W	
Working Temperature	-40°C to 60°C (-40°F to 140°F)	
Storage Conditions	0 to 90% RH	
Certifications	CE /FCC	
Ingress Protection	IP66	
Casing	Metal	
Dimensions	φ226 × 362.8mm (φ8.9 × 14.28 inch)	
Net Weight	6kg (13.2lb)	

Please be aware specifications can vary from time to time