



NWPL-4PL1100

4MP Payload Multi-Spectrum PTZ Camera



Key Features:

- 4MP Full HD Optical Sensor
- 2592x1520 and 1280x1024 Infrared Sensors
- 1570nm Laser Rangefinder/Tracker
- 91x Optical Zoom (Visible) 12x and 12x Optical Zoom (IR)
- Multi-Axis gimbal
- MIL-STD 810 certified
- GPS, INS, Geo-pointing, Controllable, Radar integration via I/O

Product Overview

Infinity Payload cameras are unique multi-sensor, multi-gimbal turret style cameras that can be affixed to aircraft for high speed and high altitude applications.

Features

Multiple Sensors

Offering visible imagery at 4MP but also providing multi wavelength Infrared (IR) and multiple Laser imagery and pointing functionalities.

Technical Specification

Visual Camera	
Wavelength	0.4 μ m ~ 0.75 μ m visible spectrum
Effective Pixels	2592(H) \times 1520(V)
Focal Length	12 ~1100mm, 91x optical zoom
Short Wave IR (SWIR)	
Wavelength	0.8 μ m ~ 0.95 μ m
Effective Pixels	1280(H) \times 1024(V)
Focal Length	90 ~1100mm, 12x optical zoom
Medium Wave IR (MWIR)	
Wavelength	8 μ m ~ 14 μ m
Effective Pixels	1280(H) \times 1024(V)
Focal Length	90 ~1100mm, 12x optical zoom
NETD	20mK
Video	
Compression and Resolution	H.265,H.265,MJPEG
Max. Resolution	1520P(2592 \times 1520)
Streaming Capability	3 Streams
Main Stream / Frame Rate	Optical: 2592 \times 1520/1920 \times 1080, 1280 \times 720 @25/30fps Thermal: 1920 \times 1080 @ 25/30fps
Sub Stream / Frame Rate	VGA, 640 \times 360, CIF, QVGA @25/30fps
Bit Rate Control	CBR/VBR
Image Enhancement	HLC / Defog / WDR
White Balance	Auto/Tungsten/Fluorescent/Daylight/Shadow/Manual
Features	AGC, WDR, Image Stabilizer, 2D/3D DNR
Electrical	
Power Supply and Consumption	48V DC // 300W ~ 600W Max
Operating Conditions	-40 $^{\circ}$ C ~ 65 $^{\circ}$ C
Certifications	CE / FCC // Metal Casing // MIL STD 810G
Dimensions, Weight	\leq ϕ 565mm x 880mm; 105Kg

Laser Rangefinder	
Type	ANSI Class I, ANSI Class 4
Wavelength	1570nm
Compatibility	US & NATO Laser Guided
Ranging Distance	Greater than 18km
Ranging Accuracy	Greater than 3m
Laser Designator/Tracker	
Type	Diode
Wavelength	1570nm
Beam Divergence	\leq 4 μ m
Mode	Continuous, Pulse
Network	
Protocols:	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP
Interoperability	ONVIF, CGI, SDK
Web Viewer	<IE11, Chrome, Firefox, Safari, Edge
Physical	
Pan/Tilt Range	Pan: 0 $^{\circ}$ ~ 360 $^{\circ}$ endless, Tilt: +20 $^{\circ}$ ~ -120 $^{\circ}$
Functions	
Angular Speed	Greater than 60 $^{\circ}$ /s
Angular Acceleration	Greater than 60 $^{\circ}$ /s
Accuracy for Target	Less than 0.1 $^{\circ}$ /s
Tracking	Support, without slip and without loss
Interface	
Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
I/Os	1x 28V output
Features	2x RS485, GNSS
Detections	
Detection Distance (Fire: 1m x 1m)	Up to 9km
Detection Distance (Fire: 2m x 2m)	Up to 15km
Detection Distance (Humans: 1.8m x 0.5m)	Up to 20km
Detection Distance (Vehicles: 2.3m x 2.3m)	Up to 25km
Identify Distance (Humans: 1.8m x 0.5m)	Up to 11km
Detection Distance (Vehicles: 2.3m x 2.3m)	Up to 17km
Detection Distance (UAV)	Up to 5km

Connections

J29A-9ZKP Rectangular Connection

Serial number	Signal definition	Socket core number	Signal direction	Remark
1	P24V	1, 2, 3, 4	Aerial carrier→payload	Power supply input
2	PGND	6, 7, 8, 9	Aerial carrier→payload	
3	Empty	5		

J30J-15ZKP Rectangular Connection

Serial number	Signal definition	Socket core number	Signal direction	Remark
1	RS422RX+	1	Aerial carrier→payload	Main: 422
2	RS422RX-	2	Aerial carrier→payload	
3	RS422TX+	3	Payload→ Aerial carrier	
4	RS422TX-	4	Payload→ Aerial carrier	
5	DGND	5		
6	Ethernet RX+	9	Aerial carrier→payload	100mb Ethernet
7	Ethernet RX-	10	Aerial carrier→payload	
8	Ethernet TX+	11	Payload→ Aerial carrier	
9	Ethernet TX-	12	Payload→ Aerial carrier	
10	Empty	remain		