



## TSN-LV Long distance Laser Night Vision Camera

### Introduction:

Using active laser infrared night vision with good background contrast, clear imaging, and uninfluenced by outside lightings.

TSN-LV is an independent intelligent patent night vision camera. Accompanied with color to black video camera, this series can realize continuous monitoring day and night.

This product can recognize people and vehicles 3000 meters away.

With the high intensity aluminum and stainless steel, this one can be used in many occasions such as night, harsh environment, long distance, large scope or hidden monitoring.



### Main Use:

- Oil fields, Railways, Airports, harbors, engineering constructions, forests fireproofing and Police reconnaissance, Large areas/ invisible real-time monitoring
- Frontier and coast defense, national defense, Night campaign, Military facilities, military department and military station

### Environmental indicator:

- Working temperature: - 25°C~+55°C;
- Storage temperature: - 40°C~+65°C;
- Anti-vibration: 15m/s<sup>2</sup> 5~200Hz;
- Anti-impact: 150m/s<sup>2</sup> 11ms;
- Anti-salt fog: continuously spraying 48hours under PH of 6.5~7.2



Product Features	
Lighting source electric zooming	Adopt long distance, large scope laser infrared zooming illuminating technology; lighting angle $0.5^{\circ} \sim 17^{\circ}$ ; high penetrating rate at 85% with many infrared coating; gets the patent from State Intellectual Property Office of PRC
MQMM Homogenization Technology	Adopts multi quanta array laser coupling and lens wave guide fiber homogenization, avoid laser speckle and illumination become more uniformity.
SSZ Intelligence Simultaneous Zooming Technology	Adopt digital processor, analyse focal length and outside controlling information; lighting spot can be simultaneously zooming or independently adjusted; simultaneous pre-setting bits about pan-tilt, lens zooming and lighting spot.
Illuminator Protecting Technology	Special laser power circuit, slowly power supply, effectively avoid power peak and prolong the lifetime of illuminator
AR Coating	Adopt imaging lens and laser lens, many AR coating, high penetrating rate at 85%
MMA Adjusting Aiming Technology	Adopt high precision adjusting aiming technology; easy to maintain
Other Special Funtions	Pre-setting bits; scanning; automatic cruising; keep watching function.
Customization	No red glow; anti-explosion; automatic focus.



Item	TSN-LV1000	TSN-LV1500	TSN-LV3000
<b>Effect distance</b>	1.000M at night, 2.000M at daytime	1.500M at night, 3000M at daytime	3.000M at night, 6.000M at daytime
<b>Laser lighting source</b>	wave length: 810nm; illuminating angle: 0.5-17°; continuous changing ;	wave length: 810nm;illuminating angle: 0.5-17°; continuous changing ;	wave length: 810nm; illuminating angle: 0.3-17°; continuous changing ;
<b>Laser lens</b>	50mm laser telephoto lens; F 2.0;		100mm laser telephoto lens; F 2.0;
<b>Laser power</b>	Two circuits drive; stable voltage and stable current; power on for 1s;		
<b>Imaging Components</b>	1/2" infrared enhancement CCD; Integrated ICR double filters switch day and night; color/black white/ automatic/ outside control adjustable; pixel: 752x582; resolution: 540 TV lines Day Mode, 600 TV lines Night Mode; illumination: 0.02LUX (color), 0.0009LUX (black white)		
<b>Imaging Lens</b>	Focal Length: 17~370mm, F: 2.3~3000; FOV: 25~1.2° Image plane: 1/2"	Focal Length :23-500mm, F=3.1~3000; FOV: 18~1.0°	Focal Length: 12.5~750mm, Image plane: 1/2"; F: 3.8~700; FOV: 30~0.62°
<b>Intelligent simultaneously control</b>	SSZ intelligent control;independent adjusting laser illuminator;		
<b>Axis adjusting structure</b>	Adjust: MMA Outside, presetting windows;Precision: 0.01°;		
<b>Photosensitive control</b>	Independent photosensitive control circuits		
<b>Cover</b>	Material: high precision aluminum alloy shell, window glass: microlite optical glass, multilayer AR film; PTA dope; IP66		
<b>Pantilt decoder</b>	Load weight: 20kg. rotate 360 horizontally, up and down vertically +45°~-45°; 80 presetting bits; 8 tracking paths;Protection grade: IP66 PELCO D、 P protocol; baud rate optional; power supply AC24V. power consumption: 30W	Load weight: 50kg. rotate 360 horizontally, up and down vertically +45°~-45°; 80 presetting bits; 8 tracking paths;Protection grade: IP66 PELCO D、 P protocol; baud rate optional; power supply AC24V. power consumption: 70W	
<b>Power supply</b>	AC220V±10%		
<b>Interface</b>	Control: RS485 Controlling signal Power supply: AC220V BNC video output		

