

TD90

Corona Camera

TD90 is an innovative NDT - Non Destructive Testing equipment, which detects, pinpoints and documents flash-arc corona and arcing partial discharge camera. Being with high sensitivity, it is a power tool to detect UV emission in full daylight with high signals from faraway and nearby sources. It is an ideal predictive maintenance device for overhead transmission lines and high voltage substations. It is widely used in transmission line inspection, electrical utilities, HV research institutes, HV electrical component inspection, HV panel inspection, service providers, laboratories and so on.

Features

High sensitivity to UV signals

Precise location of corona emitting sources

Auto focus of UV and visible channels

Light weight 2.5kg

5.7" foldable color LCD

UVSee report software for documentation

Applications

Transmission line inspection

Electrical utilities inspection

HV substations

HV research institutes

HV electrical component inspection



Technical Specifications

Item	TD90
UV - Optical properties	
Image type	Monochrome video
UV sensitivity	$\leq 3 \times 10^{-18}$ watt/cm ²
Minimum discharge detection	1.5pC @ 10 meters
Spectral range	240-280nm
FOV	5.5° x 4.0°
Focus	Auto/Manual
Focus range	2m-∞
Detector life span	No degradation
Visible - Optical properties	
Image type	Color video
Visible light sensitivity	0.1 Lux
Focus	Auto/Manual
Zoom	12x(Digital), 25x(Optical)
Image Performance	
Image Display	5.7" VGA color transfective sunlight readable LCD, folding and touchable, 640x480
UV image enhancements	Digital filtering, denoising
Image frozen	Freeze the real time image
Frequency	50Hz
Modes	Combined (UV & visible), UV only, Visible only
Video standard	PAL /NTSC
Image Storage	
Image format	.JPG
Video format	AVI
Media download	Via Card Reader, USB
Audio format	WAV
Playback	Video/Pictures/Audio
SD card	8G SD card
Storage capacity	8000 images or 4 hr video
Data process	
UV/Visible Overlay Accuracy	Better than 1 milliradian
UV image integral time	Can set the integral time
Video streaming	H.264 standard
Functional characteristics	
Alarms	Audio or LED
Menu	Button operation or touchable operation
Location	GPS
Time/Date	Can set and save time/date
Software upgrade	Upgrade via SD card
Analysis software	Generate report
Output Interface	
Power interface	Yes
Video output	CVBS
Audio output	Microphone
SD card slot	Yes
Tripod	1/4"-20
Power System	
External power	AC: 110V-240V / DC: 50-60Hz/9V 4A
Battery type	Rechargeable Li-Ion
Operation runtime	2hours
Charge	Online charging or charger
Power consumption	$\leq 10W$
Power saving	Yes
Environmental Data	
Operation temp range	-20 °C ~ +50 °C
Storage temp range	-25 °C ~ +60 °C
Humidity	$\leq 95\%$ (non-condense)
Shock	2G (IEC60068-2-6)
Vibration	25G (IEC60068-2-29)
Encapsulation	IP54 (IEC60529)
FMC	FN61000-6-4&FN61000-6-2/FCC47CFR Part15 class A/FN61000-4-8 I.5
Physical Characteristics	
Size	238mmx165mmx91mm
Weight	≤ 2.5 kg
Packing	
Standard	Corona Camera UVSee TD90, AC power adapter, 2pcs Li-ion battery, charger, SD card, SD card reader, video cable, CDROM (UVSee software and
Option	Laptop, Tripod