

MCRN-1000 Corona Camera

Overview:

Marmonix MCRN-1000 is an innovative NDT - Non Destructive Testing equipment, that detects, pinpoints and documents flash-arc corona and arcing partial discharge camera. Being with high sensitivity MCRN-1000 is a power tool to detect UV emission in full daylight with high signals from faraway and nearby sources. MCRN-1000 is an ideal predictive maintenance device for overhead transmission lines and high voltage substations.

Features:

- High sensitivity to UV signals (3×10^{-18} watt/cm²)
- Precise location of corona emitting sources
- Auto focus of UV and visible channels
- Back ground noise reduction
- 5.7" folding and touchable color LCD
- Voice or LED UV events alarm
- Rapid optical zoom of the visible channel
- Videos & images capturing, recording and playback
- Built-in GPS
- UV events counter
- UV report software for documentation
- SD card upgrade the instrument firmware



Application:

- Transmission line inspection
- Electrical utilities inspection
- HV substations
- HV research institutes
- HV electrical component inspection



UV - Optical Properties	
Image Type	Monochrome video
Minimum UV Sensitivity	3 x 10-18watt/cm ²
RIV detection sensitivity	7.7dBuV(IRV)@1MHz
Minimum Discharge Detection	1.5pC @ 8 meters
Field of View H x V	5.5° x 4.0°
Focus	Full manual and auto for UV and visible channels
Focus distance	2m ~ ∞
(UV & Visible) combined digital zoom	2X , 4X
Detector Life Span	No degradation
Frequency	50Hz
Spectral range	UV 240 ~ 280 nm
Visible - Optical Properties	
Image Type	Color video
UV/Visible Overlay Accuracy	Better than 1 milliradian
Minimum visible light sensitivity	0.1 lux
Zoom factor	26x optical and 12x digital
Display	
Type	5.7" VGA color transfective sunlight readable LCD, folding and touchable
Video Standard	PAL/NTSC switchable
Modes	Combined (UV & visible), UV only, Visible only
Corona Shades	White, Red, Blue
Processing & Communication	
Image Processing	UV image enhancements
Video Streaming	H.264 standard
Alarms	Audio or LED
Menu	Button operation or touchable operation
Location	GPS
User settings	Time/Date, Language, operating modes
Audio Modes	Microphone input for audio notes
Data Storage	
Storage Media	4G SD card (2pcs)
Image Format	JPG (supports up to 20s voice annotation)
Storage Capacity	8000 images, or >4 hours videos
Data download	card reader or USB
Video Storage	AVI compressed format
Grade/Type	Class 2, 1mW/635nm Red
Power System	
Power Consumption	10W
Battery Type	Rechargeable li-ion battery
Battery Run Time	2 hours
Charge	Online charging or charger
External supply	9-12V, 10VA
Power adapter	110-240VAC, 50-60HZ/12VDC 3.8A
Environmental Data	
Operating Temperature	-10°C ~ 50°C
Storage Temperature	-25°C ~ 60°C
Humidity (operating and storage)	95%, Non condensing
Physical characteristics	
Size (L x W x H)	238mm x165mm x91mm
Weight	2.5 kg
Encapsulation	IP54
Interfaces	
Power interface	yes
USB	Yes
SD card slot	Yes
Video output	BNC
Audio output	Microphone
accessories	
Standard	Corona Camera MCRN-1000, AC power adapter, 2 pcs Li-ion battery, charger, SD card, SD card reader, video cable, Car power adapter, CDROM (software and Manual), Warranty card, Strap, transport case
optional	Tripod