

CoroCAM 7®



The CoroCAM 7° is a professional grade solar blind, easy to operate UVc imaging system used to visualize & locate electrical discharges (corona and arcing) from HV hardware. The CoroCAM 7° features the same CoroCAM° solar blind UVc imaging system as used in the CoroCAM 6d[®], but pairs it with a high performance visible camera and a viewfinder. The CoroCAM 7° is typically used to inspect HV infrastructure operating at 3.3 Kv and above for corona discharges and arcing.

Features:

- A high resolution focusable ventilated viewfinder (800 x 600 pixels) and a large, robust mounted, variable angle, colour LED backlit LCD display (640 x 480 pixels), both optimised for use in full daylight to make inspection comfortable
- A high sensitivity detector, which can detect UVc emissions down to $2.05 \times 10^{-18} \text{ W/cm}^2$, this allows for the detection of the smallest corona discharges
- UV count compensation for distance
- Motorised solar blind filter removal in Non Solar Blind Mode to increase sensitivity for use at night or indoors
- Users can select optimised presets for detection or location of discharges Corona signals above the threshold level are displayed in realtime
- A high zoom colour visible camera with a resolution of 768 x 576 pixels
- Syncronised UV & Visible Zoom from 1x system zoom (defined as $8^{\circ}x6^{\circ}$ / 10° Diagonal) to 4x system zoom (optical for the Visible channel and digital for the UV channel)

- < 1.5 m minimum focus distance no accessory optics required
- Onboard still image and video recording in high quality formats
- Integrated GPS with internal and booster antenna
- Integrated high power flashlight
- Easily replaceable Li-ion batteries deliver up to 3 hours operating time Additional batteries are readily available and lightweight
- Fast boot avoids the need for power saving modes
- User profile setup, save and restore
- Easy operation of the camera with one hand via a multifunction keypad, hot keys to specific functions
- Ethernet port for remote control
- The On-Screen Display (OSD) shows all the relevant information
- Camera software update via download to SD card
- A 18 month warranty, extendable to 36 months

Notable Features:

Viewfinder | LCD display | Fast boot | User profiles | High sensitivity UV camera | UV count compensation | NightView mode Premium spec visible camera | High visible zoom | High resolution video recording | Translucent UV overlay | GPS booster antenna port Onboard microphone and speaker | Ethernet port | 18 month warranty

ZOOM Visible Camera Zoom: 28x optical, 12x digital | UV Camera Zoom: 4x

FIELDS OF VIEW @ 0.5x Zoom: 16° | @ 1x Zoom: 8° | @ 2x Zoom: 4° | @ 4x Zoom: 2° | UV Channel Zoom: Digital to match

visible FOV | FOV with UV Overlay: All | Focus: Automatic or manual on visible channel, UV slaved to visible or

independent manually | Minimum Focus Distance: UV 0.7 m, VIS 1.5 m

SENSITIVITY (TYPICAL) Ultraviolet: 2.05⁻¹⁸ x 10 Watt/cm² | 3 pC @ 20 m (~ 0.75 pC @ 10 m) (Korea Electrotechnology Research Institute

IEC 60270:2000) | 13.16 dBuV(RIV) @ 1 MHZ @ 10 m (Korea Electrotechnology Research Institute - NEMA107-1987)

Visible: 0.4 lx (F1.35, 50 % IRE, ICR off), normal 0.01 lx (F1.35, 50 % IRE, ICR on), auto low light

RESOLUTION Ultraviolet: 640 x 480 pixels | **Visible:** 768 x 576 pixels

IMAGE ACQUISITION Ultraviolet: Averaging & Integration | Visible: Auto low light, manual back light compensation

DISPLAY Viewfinder: Ventilated rubber eye cup, 800 x 600 pixels LED | LCD: 5.7" Backlit LCD 450 cd/cm², 640 x 480 pixels **SPECIFICATIONS** Channel Fusion: Picture in Picture, Threshold Mask, Variable Translucency | Fusion accuracy: Better than 1 milliradian

UV Overlay Colors: 5 predefined, 255 user selectable | UV Transparency: 0 - 100 %

INTERFACE Ergonomic Grip: Multifunction buttons | Menu: Icon Based Menu System

Short Cut Buttons: Activate specific functions | Remote Control: Via USB / Ethernet

CAMERA I/O USB: Auto connect USB 2.0 | Ethernet: Video streaming & remote control | Composite Video: PAL & NTSC formats

IMAGE & DATA Output / Saved Image Options: As displayed, Simplified, No info overlay | Video Format: AVI (H.264 compression)

STORAGE Image Format: JPEG | Meta-Data Contains: Camera settings & measure variables, i.e. GPS location

Storage Media: SD Card (up to 64 GB)

FIRMWARE FEATURES Image Series Numbering: Allows for auto sorting of images at download to PC for reporting

Gallery & Playback: Review recorded media | Field Upgradable: Download latest firmware

Quick Startup: Power on to record capable in 60 s

POWER Battery: Sony Li-ion, Type L compatible | Operating Time: 150 min operation typical | Recharge time: 180 min

PHYSICAL Weight: 2.2 Kg | Dimensions: 220 mm L \times 80 mm W \times 160 mm H | Operating Temp: -15 °C to 55 °C

SPECIFICATIONS Storage Temp: $-20 \, ^{\circ}\text{C}$ to $60 \, ^{\circ}\text{C}$

PROTECTION Storage / Transport Case: Pelican style plastic hard case | Camera Body: Tested to IP 54

Physical Protection: Impact absorbing covers | Safety Standard: CE,IEC1010-1

STANDARD SYSTEM

- CoroCAM 7® DAYLIGHT UV IMAGER
- **OPERATING MANUAL**
- 2x Li-ION BATTERY, AC MAINS ADAPTER & DUAL CHARGER
- PROTECTIVE HARD CARRY CASE
- BASIC REPORTING SOFTWARE
- CABLE SET & HEADSET

OPTIONAL ACCESSORIES

- ACCESSORY PACK I INSPECTION GUIDE, FEATURING THE EPRI FIELD GUIDE
- ACCESSORY PACK II SAFETY VEST WITH POUCHES FOR SPARE BATTERIES

