

WHITWERX LLC — FIELD TOOLS

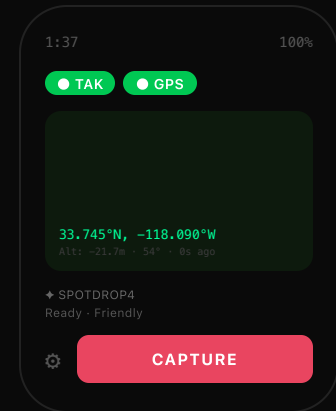
SpotShot

TAK integrated camera for seamless transmittal of imagery

v1.51

Android

TAK Server 5.x



CORE CAPABILITIES



GPS-stamped spot markers

Every capture generates a CoT event with precise lat/lon, altitude, and timestamp — appears on ATAK/WinTAK maps instantly.



One-button operator mode

Strips the UI to torch, zoom, and capture. Volume button fires the shot. GPS and timestamp baked into every photo.



Username/password enrollment

Enrolls directly against TAK Server with credentials. mTLS client cert provisioned automatically — no manual cert handling.



Auto-queue and retry

Shots taken offline are queued locally and flushed automatically when connectivity is restored. Nothing is lost.



Claude Vision AI

Optional AI-powered OCR and scene description. Claude analyzes every



MGRS / Lat-Lon display

Toggle between decimal lat/lon and MGRS on the viewfinder overlay.



Position reporting (PLI)

Background PLI broadcasts operator position as a friendly track at configurable intervals — even when the app is minimized.



Scene packages

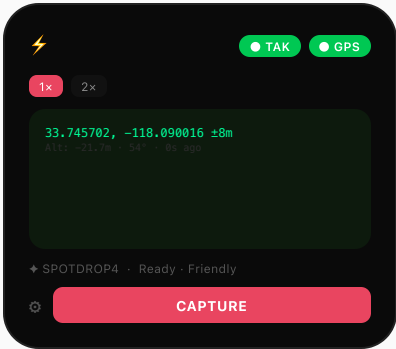
Named scenes group all shots into a structured ZIP package for transfer log

photo and populates CoT remarks automatically.

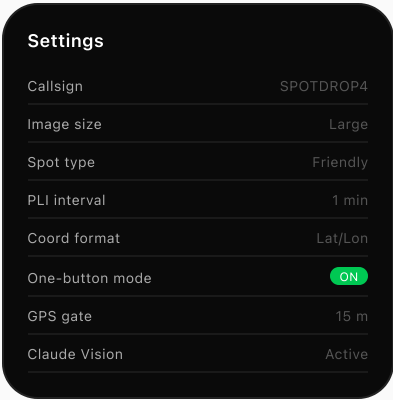
Coordinates are baked into every capture.

and archival. Start/stop per operation.

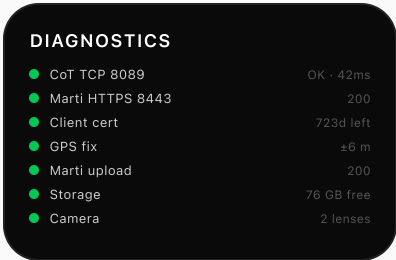
APP SCREENS



Camera



Settings



System Diagnostics

DEPLOYMENT IN 5 STEPS

01

Install APK

Sideload the APK via ADB or direct transfer. No Play Store required.

02

Add profile

Enter server FQDN, callsign, username and password. Tap Enroll.

03

Cert provisioned

SpotShot generates a key pair and receives a signed mTLS cert automatically.

04

TAK dot green

Connection to CoT TCP 8089 and Marti HTTPS 8443 confirmed. Operator is live.

05

Shoot and send

Every capture transmits CoT + photo to TAK Server. Spots appear on map in real time.

TECHNICAL SPECIFICATIONS

Platform	Android 8.0+ (API 26)	TAK Server	v4.x – v5.x
CoT transport	TCP 8089 (mTLS)	File upload	HTTPS 8443 (Marti)
Enrollment	HTTPS 8446 (Basic Auth)	Certificate	RSA 2048 / PKCS#12
GPS format	Lat/Lon · MGRS	Image sizes	Small 5 KB · Med 15 KB · Large 50 KB
AI integration	Claude Vision (Anthropic API)	Version	1.51