TECHGUARD

Solar Camera Pro

Solar Security Camera • techguard.ng

Solar Camera Pro User Manual

Product: Solar Camera Pro
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Category: Solar Security Camera
Connectivity: 4G LTE (SIM) and 2.4 GHz Wi-Fi
Power: Solar panel + rechargeable battery

What this camera does

The TechGuard Solar Camera Pro is a wireless, solar-powered 4G and Wi-Fi PTZ security camera designed for gates, compounds, construction sites, and off-grid perimeters. You add it in the TechGuard app by scanning the QR sticker on the camera body (for 4G SIM) or over 2.4 GHz Wi-Fi.

In the TechGuard app you can:

- Watch live video, speak through two-way audio (Talk), mute audio, take a Snapshot, and switch HD / SD quality
- Pan and tilt the camera using the on-screen D-pad (release to stop; there is no pinch-zoom)
- Play History clips stored on the camera's microSD card (when a healthy card is inserted)
- View, share, and delete Photos captured from live view (saved on your phone)
- Adjust supported camera settings: motion recording, human detection filter, flip image, timestamp overlay, PIR sensitivity, night vision mode (Auto or IR), power mode, anti-flicker, and siren tone
- Check battery percentage and Charging status when reported by the camera

This model does not include a privacy/sleep blanking toggle, status LED toggle, siren on/off switch, pinch-zoom, or 24-hour/30-day cloud video DVR without an SD card.

What you need

- The TechGuard mobile app on iOS or Android (native build)
- Camera permission enabled on your phone (to scan the body QR sticker)
- Microphone permission enabled on your phone (if using two-way Talk)
- For 4G: an active nano-SIM with a data plan inserted into the camera
- For Wi-Fi: a 2.4 GHz Wi-Fi network (5 GHz networks are not supported)
- A microSD card inserted if you want History playback

Setup and pairing

Cellular 4G (recommended)

1. Insert an active SIM card with mobile data into the camera slot and power on the camera.
2. Wait until the camera indicator shows a continuous blinking blue light.
3. Open the TechGuard app, tap Add Device, and select Solar Security Camera.
4. Choose the body QR scan option and scan the QR sticker printed on the camera arm or housing. The camera does not scan your phone screen on this path.
5. Name your camera (for example, "Front Gate" or "Compound") and tap Save.

Wi-Fi (2.4 GHz)

1. Open Add Device -> Solar Security Camera -> Wi-Fi.
2. Enter your 2.4 GHz Wi-Fi network name and password, then follow the on-screen pairing steps.

Legacy phone-screen QR

Some units can read a QR code displayed on your phone screen. Hold the phone 15 to 20 cm in front of the lens until the camera chimes. Use the body QR path first for SIM cameras.

If pairing fails

Symptom	Resolution
No QR data	Scan the QR sticker on the camera body, not a code on another phone.
Already bound / could not claim	Reset the camera using its reset button, wait for the blinking blue light, and scan again.
No new device found in cloud	Confirm the SIM has active data (or 2.4 GHz Wi-Fi credentials are correct), reset the camera, and retry.

Live view controls

Open the camera from the Home screen. Battery and solar cameras sleep to save power and may display Waking camera... for a few seconds before video starts.

Control	What it does
Play / Stop	Start or stop the live video stream.
Mute	Mute or unmute camera audio.
Talk	Speak through the camera speaker (requires microphone permission).
Snapshot	Save a still image to Photos in the app and your phone gallery.
HD / SD	Switch stream quality. Use SD if the connection is slow.
Full screen	Switch to landscape live view.
D-pad	Pan and tilt the lens. Release to stop movement.

If live view fails to connect, verify the solar battery has charge, confirm the SIM has active data or Wi-Fi is in range, and try again after the camera wakes.

History and photos

- History plays recorded clips directly from the camera's microSD card. If no card is inserted, or if the card is formatting or has an error, the app displays the card status.
- Direct clip download and recording deletion from the microSD card are not supported by this firmware. To save a copy of a clip to your phone, play it in History and use Save while watching.
- Photos stores snapshots captured during live view. You can view, share, or delete them from the app.

Settings

Open the camera and tap Settings. Only controls supported by your camera firmware are shown:

Setting	What it does
Motion recording	Save clips to the microSD card when motion is detected.
Human detection filter	Filter alerts to prioritize human movement.
Flip image	Rotate video 180 degrees for inverted mounting.
Timestamp overlay	Display date and time on the video feed.
PIR sensor	Set motion sensitivity: Off, Low, Medium, or High.
Night vision	Switch between Auto and IR (infrared).
Power mode	Choose low-power (wakes on PIR motion) or continuous mode.
Anti-flicker	Set to Off, 50 Hz, or 60 Hz (use 50 Hz in Nigeria).
Siren tone	Select the alarm sound style (tone selection only).

Everyday care and maintenance

- Mount the solar panel facing unobstructed sunlight for consistent daily charging.
- Clean dust and rain residue from the solar panel and camera lens periodically.
- Keep the 4G SIM topped up with data if using cellular connectivity.
- Ensure the weatherproof rubber seals around the SIM and microSD slots are firmly closed after installation.