



RAPID-DEPLOYMENT SURVEILLANCE SOLUTION

# Rapid Deployment IP Camera System

Solar-powered, 4G, fully self-contained 3 MP HD surveillance — set up by one person in minutes and run for days, anywhere off-grid. No trenching, no fibre, no mains power.



### No wired internet

4G P2P networking — no fibre or fixed broadband needed on site



### 2-min setup

Single-person rapid deployment, tool-light



### 2+ days off-grid

Solar + 12V battery autonomy with backup port



### All-weather build

IP66 camera · marine-ready, corrosion-resistant

#### BUILT FOR

Remote & off-grid sites

Construction sites

Marine floating platforms

Emergency & temporary

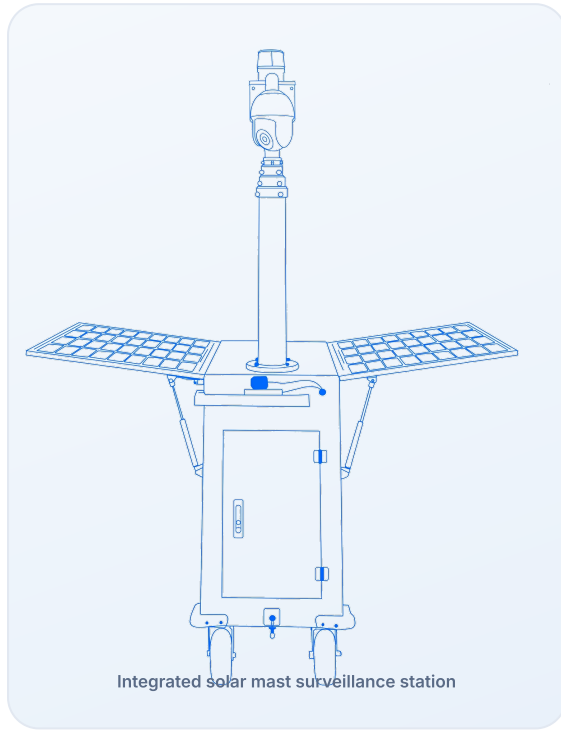
Agriculture & conservation

Events & perimeter

## — HOW IT WORKS

# One self-contained system. Zero site infrastructure.

Camera, lifting mast, solar power, energy storage and 4G networking are integrated into one rapidly deployable unit. Roll it in, raise the mast and it is live — independent of mains power, fibre or on-site Wi-Fi, ideal for sites where running cabling is impractical or impossible.



- 1 PT camera + dual light + alarm**  
Dahua DH-P3AE-PV-4G — 3MP pan & tilt, AI detection, smart dual illuminator and active sound-&-light deterrence.
- 2 Telescopic lifting mast**  
Pneumatic one-key lift, configurable 3–5.8 m for clear, wide-area coverage; stainless option for marine use.
- 3 Monocrystalline solar panel**  
60 W+ high-efficiency panel with charge controller, surge & lightning protection — keeps the system topped up.
- 4 Lockable weatherproof enclosure**  
Houses the 12 V battery, charge controller and 4G network module (RJ45 / SMA antenna), protected behind lock.
- 5 Mobile / marine base**  
Trolley base for land mobility, or corrosion-resistant fixings for bolting onto a floating platform or deck.

### STEP 01



#### Deploy

One person positions the unit and raises the mast — operational in minutes, no contractor or groundwork.

### STEP 02



#### Power

Solar charges the 12 V battery for 2+ days of autonomy; a backup port accepts mains or a generator on dull days.

### STEP 03



#### Connect

Built-in 4G P2P links the camera to the cloud; the enclosure's 4G router adds 2.4 GHz Wi-Fi and RJ45 Ethernet where useful.

### STEP 04



#### Monitor

Live 24/7 view, alerts and playback on iOS, Android, PC CMS and the DMSS app; recorded to on-board microSD.

## — WHERE IT'S USED



#### Remote & off-grid

Sites with no power or broadband



#### Construction sites

Temporary security & oversight



#### Marine floating platforms

Coastal / over-water monitoring



#### Emergency & temporary

Rapid response, event surge



#### Agriculture & conservation

Farms, fisheries, reserves



#### Events & perimeter

Crowd & boundary surveillance

# Proven camera. Rugged, self-powered platform.



## The Camera – Dahua DH-P3AE-PV-4G

3 MP outdoor 4G pan & tilt network camera from Dahua's Active Defense series — clear evidence day or night, with on-board AI and active deterrence.

- 3 MP Super-HD**  
2304 × 1296, sharp detail

**Wide-area PT + auto-track**  
Pan 345° · tilt 90°, follows targets

**Smart dual light**  
Full-colour night · 30 m warm + IR

**Two-way talk**  
Built-in mic & speaker

**H.265 compression**  
Lower bandwidth & storage
- 4G LTE built-in**  
Live link without Wi-Fi

**AI human & vehicle**  
Fewer false alarms (SMD 3.0)

**Sound & light alarm**  
Active intruder deterrence

**IP66 weatherproof**  
-30 °C to +55 °C, 2 kV surge

**microSD up to 256 GB**  
On-board loop / time-lapse

## POWER & STRUCTURE

**Solar Power System**


- 60 W+ monocrystalline panel, high-efficiency photoelectric conversion
- Solar charge controller — voltage regulation & charge/discharge logic
- Surge & lightning protection device built in
- Backup charging port for mains / generator top-up
- RoHS-compliant components

**Marine Deep-Cycle Battery**

- 12 V VRLA deep-cycle, marine-grade
- ≥ 2 days full-system autonomy on a full charge
- UL94-V0 flame-retardant, leak-proof casing
- Maintenance-free, spill-proof, corrosion-resistant
- Over-charge / over-discharge / short-circuit protection

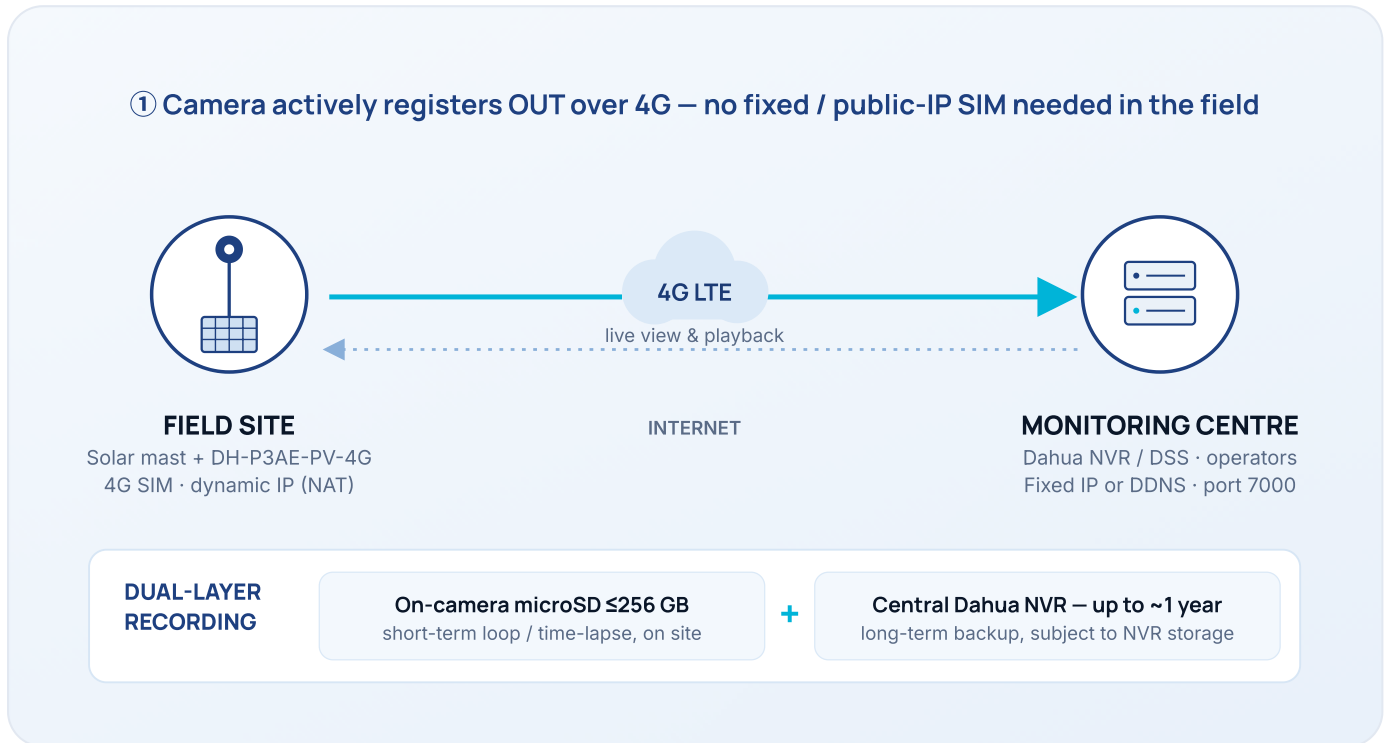
**Telescopic Lifting Mast**

- Pneumatic one-key lift, aluminium alloy
- Configurable 3–5.8 m for wide-area coverage
- Stainless / corrosion-resistant option for marine use
- Multi-function platform for add-on sensors



# Long-term central backup – without a fixed-IP SIM.

A 4G SIM normally gives the camera a dynamic, NAT'd IP address, so reaching it remotely — or recording it to a central site — usually needs an expensive fixed / public-IP data plan. **Dahua Auto Registration** turns this around: the camera **actively dials out** and registers itself to your central Dahua **NVR / DSS**. The field unit needs **no fixed or public IP** at all — and the NVR keeps a long-term backup, up to about a year, alongside the on-camera microSD.



**No fixed-IP SIM**  
Works behind 4G NAT — avoids costly public / static-IP data plans.

**Up to ~1-year backup**  
Central NVR retains far longer than on-camera microSD (storage-dependent).

**Centralised management**  
Many remote sites feed one Dahua NVR / DSS — a single operator view.

**Dual redundancy**  
Local microSD + central NVR — footage survives device loss or theft.

**The outcome**

Live remote monitoring plus evidential-grade central recording from any off-grid site — retained for up to a year, over a standard 4G SIM. New Forward configures and commissions the camera-to-NVR link end-to-end.

**Set up & commissioned by NF**

**How it's set up:** enable **Auto Registration** on the camera (Network > Auto Registration) with a Sub-Device ID, then add it on the NVR as a **Registered** device with the matching ID (default port 7000). The NVR / DSS sits at your monitoring centre on a fixed IP or domain (DDNS); the field camera needs neither. Backup retention depends on NVR storage, channel count, resolution and recording mode.

# Full specification, supply & support.

## Camera – DH-P3AE-PV-4G

Image sensor	1/2.8" CMOS, 3 MP
Max. resolution	2304 (H) × 1296 (V)
Lens / aperture	4.0 mm fixed, F1.6
Field of view	H 73.85° · V 43.43° · D 86.56°
Pan / tilt	Pan 0–345° · Tilt 0–90°
Illumination	30 m IR + 30 m warm (smart dual)
Smart events	IVS tripwire/intrusion · human & vehicle · auto-track · SMD 3.0
Video	Smart H.265+/H.265/H.264; up to 25/30 fps
Audio	Built-in mic & speaker · two-way talk
Network	4G LTE-FDD · P2P (DMSS)
Storage / app	microSD ≤256 GB · DMSS (iOS/Android/PC)
Power	12 VDC · 3 W basic / 9 W max
Operating temp.	-30 °C to +55 °C · ≤95 % RH
Protection	IP66 · 2 kV TVS lightning & surge
Certification	CE

## Power & platform system

Solar panel	60 W+ monocrystalline
Charge control	Solar controller + surge/lightning protection
Backup input	External charge port (mains / generator)
Battery	12 V VRLA marine deep-cycle
Autonomy	≥ 2 days on full charge
Battery safety	UL94-V0 · leak-proof · OCP/ODP/SCP
Mast	Telescopic 3–5.8 m · one-key lift
Mast material	Aluminium alloy · stainless option (marine)
Enclosure	Lockable weatherproof case
Connectivity	4G/5G router · 2.4 GHz Wi-Fi · RJ45 · SMA antenna
Central backup (opt.)	Dahua Auto Registration → NVR · up to ~1 yr · no fixed-IP SIM
Mounting	Mobile trolley / fixed marine fixings
Expansion	Add-on sensors: PM2.5, temp/humidity, noise, etc.
Compliance	RoHS components
Config.	Tailored per site (panel/battery/mast)

## TURNKEY SUPPLY & SUPPORT



### Mobile data

1-year 4G/5G SIM data connection service for the system.



### Installation

Professional on-site installation and commissioning at the designated location.



### Maintenance – 1 year

On-site service (wages & parts) · response within 24 h for urgent cases · replacement service.

## Why New Forward Technology



### Licensed & certified

HK Security Company Licence No. 2327 — one-stop supply, install & maintain.



### Proven off-grid track record

Custom solar + 4G surveillance delivered for government works (e.g. DSD worksite ELV).



### Coastal-grade engineering

Salt-spray-tested marine hardware (IP66/IP67) proven across our solutions.

## Ready to deploy where there's no power or network?

Request a tailored quotation or a site assessment — we handle supply, installation and maintenance end-to-end.

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