



Oil & Gas

Rail

Highways

Construction

Mining

Security

The Solar CCTV & RADAR System (SICS\_PTZ\_RADAR) is an award-winning, innovative solution designed to provide surveillance and enable data transmission in off-grid locations. It is a ruggedised, semi-portable surveillance and communication system powered entirely by renewable energy that operates in highly corrosive environments and temperatures ranging from -40°C to +80°C.

**Key features**

- Provides security and communication systems in off-grid locations, meaning remote locations can be secure and connected without the need for hard wired power or data
- A ruggedised solution that supports any camera enabling HD CCTV, thermal imaging and auto-tracking in remote locations
- Reduces civil engineering costs by eliminating the need for significant groundworks to install masts and ducting for power and data cabling
- Self-sustaining on renewable energy, saving in excess of 1000 lb. of CO2 emissions per unit and per year
- Enables wireless cellular or WIFI networks in areas with no existing data infrastructure
- Thermal Radar is a network-based thermal surveillance and detection solution providing constant 360° situational awareness, up to 820ft
- Built-in battery redundancy system and remote monitoring of battery and power performance status, which enables proactive maintenance
- A robust system made from 316L stainless steel for resistance against the effects of harsh environments. The Solar CCTV System operates in highly corrosive environments and temperatures ranging from -40°C to +80°C

Cellular or Wireless Point to Point Options  
360 Degree Thermal Radar  
HD IP PTZ Camera



Connect to VMS using cellular/wireless networks  
360 visibility with a total range of 820ft  
HD resolution at 50 fps

20ft Telescoping Tower



Winch down and Lockable

Up to 1.2kWh Solar Array



Large solar array to support high power loads

Harsh Environment Cabinet



Housing 9.6kWh Battery System and Control Equipment

Stabilising Legs



Deploy using Forklift or Trailer

Transport Skid

- Open source and integrates with any 3rd party hardware and software meaning it can be seamlessly integrated into existing security solutions
- Incorporates base with stabilisation legs, thermally insulated cabinet and 20ft telescopic mast

**Additional Options**

- High-speed and reliable internet connection and site-wide Wi-Fi on site allowing your site to be connected and fully functional on day one of the project



**OPERATIONAL CAPABILITY**

The SICS PTZ & RADAR is a rapid deployment surveillance system, which can be deployed in extreme locations and be connected to your Video Management System in under 1 hour via wireless or cellular networks. Designed to be simple to operate, this system provides advanced security and is powered using clean energy. Our 20ft mast supports our camera sensor and offers 1080p HD resolution, delivering 360-degree visibility up to 820ft with 32x optical zoom using the integrated thermal imaging radar, even in complete darkness. In addition, our sensor integrates advanced security analytics, alerts and exclusion zones.

**SECURITY SENSORS**

- HD IP PTZ Network Camera
- Thermal Imaging Radar

**UNIT DIMENSIONS**

- Transport: H 8ft W 7ft D 7ft
- Deployed: H 20ft W 7ft D 7ft

**OPERATING TEMPERATURE**

- -40°C to +80°C

**POWER**

- 800 - 1.2kWh solar panel array
- Power consumption: 60w
- Battery system: 9.6kWh
- Weight: 2204 lb.

**ARCTIC CABINET**

**Material:** 316L Stainless Steel, corrosion resistant

**Features:**

- Dual doors with dust/water seals
- Concealed door hinges
- Integrated foldable solar array bracket

**IP RATING**

- IP66 rated

**SICS SYSTEM SOFTWARE**

**Features:**

- Integrates with any IP CCTV Video Management Software (VMS) via Onvif
- Remote system health status and power performance monitoring

**TRANSPORT BASE**

**Material:** 316L Stainless Steel, corrosion resistant

**Features:**

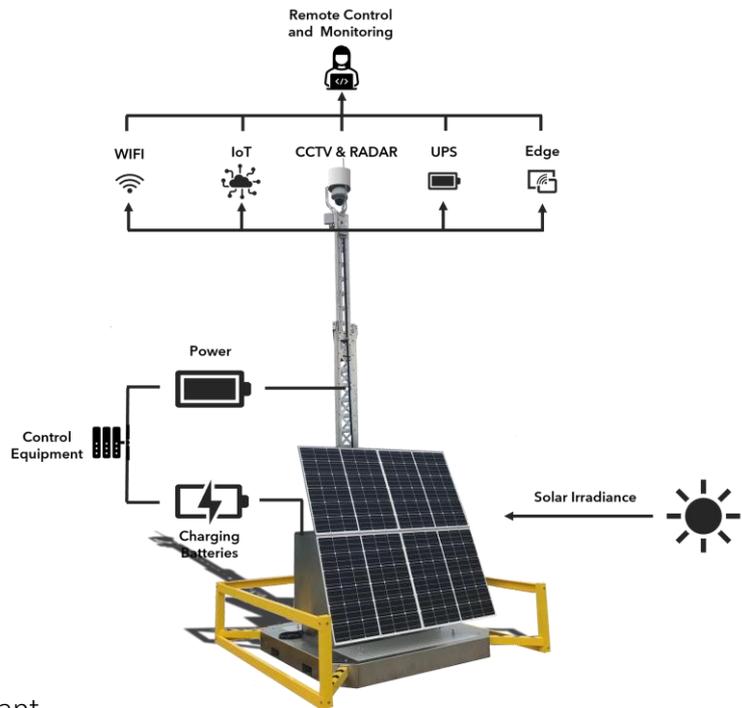
- Integrated forklift and lifting eyes
- Adjustable stabilising legs

**OPTIONAL COMPONENTS AND BESPOKE INTEGRATIONS**

- Surveillance Mast heights can be variable between 20ft or 26ft
- Customer specified IP PTZ Camera and Telecommunications Devices (Cellular, Wireless PtP/PtMP and Satellite Connectivity)
- Optional Methanol or Hydrogen Fuel Cell backup for higher loads or locations with poor irradiance

**OPTIONAL SERVICES**

- Desktop irradiance and solar potential survey
- Bespoke solar platform design
- Co-design and development



**MAST**

**Material:** 316L Stainless Steel, corrosion resistant

**Features:**

- Anti-wind loading design
- Demountable handle
- Deployed Height: 20ft
- Servicing Height: 8ft

**SOLAR PANELS**

- High power monocrystalline solar panels - Sunpower E20 Cells
- Optional hydrophobic coatings to prevent build up of sand, dust and dirt for improved efficiency

**OTHER**

**Certifications:** EAC Certification, CE Marking & British Standards:

- Eurocode 3 - Design of steel structures, BS EN 1993-3-1:2006 Eurocode 1 - Actions on structures, BS EN 1991-1-4:2005 Eurocode 3 - Design of steel structures, BS EN 1993-3-2;2006



**NDAA**

Compliant