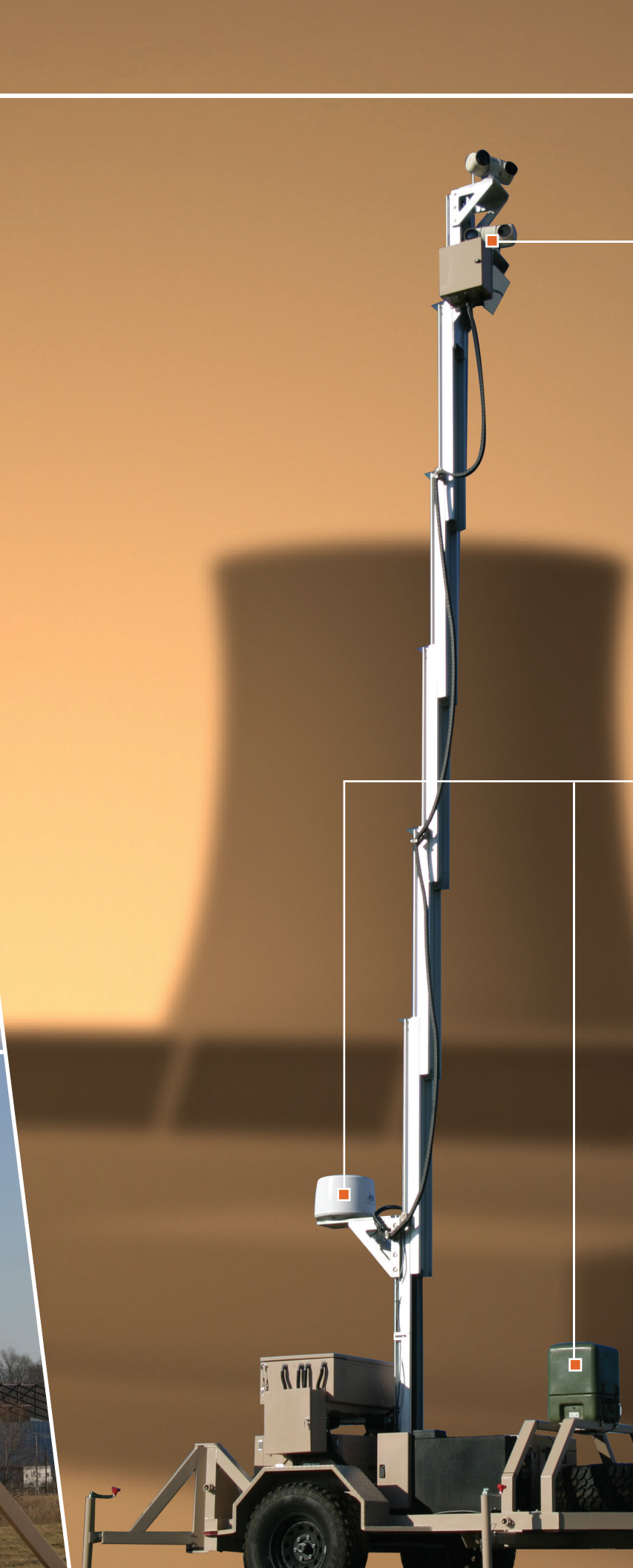




Cerberus fully-integrated mobile perimeter security systems provide focused surveillance capabilities suitable for rapid deployment wherever unmanned surveillance or communication is required. Cerberus platforms provide the flexibility necessary for variable terrain environments with seamless networking capability to support the common operation picture. Alone, a Cerberus unit supplies the information needed for a specific region at a given time. Networked, multiple Cerberus platforms communicate autonomously with each other to act as the ideal virtual fence solution. Cerberus is available in short-, mid- and long-range configurations to optimize the needs of any terrain or security environment.

INTEGRATED TACTICAL  
SURVEILLANCE PLATFORMS

FULLY INTEGRATED SOLUTIONS



# FEATURES

## CAMERAS

ICx thermal imaging cameras can see in total darkness and almost any weather condition, including fog and rain. With the Vision-Sense™ capability to overlay CCD and thermal images in real time, the system has the ability to see through glass and glare. All of the ICx imagers have 360° pan/tilt and slew to cue operability.

## SOFTWARE



The radar and camera subsystems are managed by the ICx Cameleon™ Software, a scalable command and control that includes, video management, storage and analytics software solution. Cameleon also enables interoperability between Cerberus and larger legacy command and control architectures, to help form the backbone of a total wide area perimeter security solution.

## RADARS

The line of ICx radars is capable of detecting personnel, vehicles and crawlers as well as tracking their progress across the terrain in question. Once a target moves within a designated distance from the perimeter, they are detected by ground based radars and the linked imager immediately slews to cue in order to identify and assess the target.

## TACTICAL PLATFORM

The military grade mobile platform is battery powered with generator back-up and optional solar panels, providing two weeks of continuous stand alone power. This highly efficient generator has voltage sensing capability and only starts when the battery reaches preset voltage parameters. While powering the sensor suite, the generator also recharges the battery, minimizing total fuel consumption.

The lightweight ladder mast design mast extends to a maximum height of 30 feet. It features a hydraulic system that allows the operator to easily plum the mast to ensure the sensors can be correctly calibrated. Quick release mounts for the radars and cameras enables rapid deployment when on site.

# OPTIONS & SPECIFICATIONS

## STANDARD CONFIGURATION

### MOBILE TOWER

#### Trailer

|                      |                        |
|----------------------|------------------------|
| Deployed Dimensions  | W 16'6" x L 18'6"      |
| Transport Dimensions | W 7'10" x L 12'        |
| Weight               | 3,000 lbs to 4,000 lbs |

#### Mast

|        |                                       |
|--------|---------------------------------------|
| Height | 30' (deployed)<br>8' (transport mode) |
|--------|---------------------------------------|

|                      |           |
|----------------------|-----------|
| Deployment mechanism | Hydraulic |
|----------------------|-----------|

|       |              |
|-------|--------------|
| Power | 110v or 220v |
|-------|--------------|

|           |             |
|-----------|-------------|
| Generator | 5.5k Diesel |
|-----------|-------------|

|                    |               |
|--------------------|---------------|
| Fuel tank capacity | 15-65 gallons |
|--------------------|---------------|

|                             |     |
|-----------------------------|-----|
| Rechargeable battery system | Yes |
|-----------------------------|-----|

|              |          |
|--------------|----------|
| Solar panels | Optional |
|--------------|----------|

|                        |          |
|------------------------|----------|
| Wireless communication | Optional |
|------------------------|----------|

|                      |                            |
|----------------------|----------------------------|
| Network configurable | Optional – multiple towers |
|----------------------|----------------------------|

|         |     |
|---------|-----|
| C2 Node | Yes |
|---------|-----|

### OPTICAL SENSORS

|                         |   |
|-------------------------|---|
| Image stabilization     | Yes   |
| Field of View           | 2.0° to 42°<br>Continuous zoom              |
| Zoom                    | Optical 26x,<br>Digital 12x<br>(Total 312x) |
| Low light performance   | 0.05lux/1/4 sec (NTSC)                      |
| VisionSense™ Technology | Combined Video/IR<br>Presentation           |

### C2 NODE FEATURES

#### COMMAND AND CONTROL (C2 NODE)

- Multi camera and radar interface
- Video motion detection
- Environmentally hardened/controlled
- Power management
- Ethernet interface
- VGA/SVideo Output
- -10 - +55 Operating Temperature
- 10 to 90% Relative humidity (non-condensing)

#### CAMELEON TACTICAL SOFTWARE

- Multi-camera and radar control
- IP and Analog Camera interface
- Slew to cue camera capability
- GPS tracking interface
- Multi-sensor interface
- Alarm management
- Multi-map capable
- Windows capable

## SENSOR OPTIONS



### TX MODEL

NOMINAL RANGE 5.0KM

#### THERMAL CAMERA (HD)

|                    |                                    |
|--------------------|------------------------------------|
| Thermal detector   | Uncooled VOx Microbolometer        |
| Spectral response  | 8-12 microns (LWIR)                |
| Lens focal length  | 45/135mm                           |
| Dual Field of View | WFOV 10°x8°, NFOV 3°x3°            |
| Detection range    | 8,900m (NFOV)                      |
| NETD               | <50mk                              |
| Automatic control  | Focus, Gain/Level                  |
| Pan and Tilt       | 360° continuous in pan, ± 80° Tilt |

#### RADAR

|                   |   |
|-------------------|---|
| Detection Range   | Person 10m – 3,500m<br>Vehicle 10m – 4,400m |
| False Alarm Rate  | <2 per 24 hours                             |
| Beam width        | Azimuth 1.4°, Elevation 2.4°                |
| Elevation control | Yes   |
| Scan rate         | 1 revolution per second                     |
| Frequency         | Ku - band                                   |



### MX MODEL

NOMINAL RANGE 1.5KM

#### THERMAL CAMERA (HD)

|                    |                                    |
|--------------------|------------------------------------|
| Thermal detector   | Uncooled VOx Microbolometer        |
| Spectral response  | 8-12 microns (LWIR)                |
| Lens focal length  | 30/90mm                            |
| Dual Field of View | WFOV 15°x12°, NFOV 5°x4°           |
| Detection range    | 7,200m (NFOV)                      |
| NETD               | <50mk                              |
| Automatic control  | Focus, Gain/Level                  |
| Pan and Tilt       | 360° continuous in pan, ± 80° Tilt |

#### RADAR

|                   |  |
|-------------------|--|
| Detection Range   | Person Crawling 2m – 200m<br>Person 2m – 1,000m<br>Vehicle 2m – 1,400m |
| False Alarm Rate  | <2 per 24 hours  |
| Beam width        | Azimuth 1.5°, Elevation 8.0°   |
| Elevation control | Yes  |
| Scan rate         | 1 revolution per second  |
| Frequency         | Ka - band  |



### SX MODEL

NOMINAL RANGE 0.35KM

#### THERMAL CAMERA (ED)

|                   |                                    |
|-------------------|------------------------------------|
| Thermal detector  | Uncooled VOx Microbolometer        |
| Spectral response | 8-12 microns (LWIR)                |
| Lens focal length | 25mm (other options available)     |
| Field of View     | 28°x21° (other options available)  |
| Detection range   | 1,760m                             |
| NETD              | <50mk                              |
| Automatic control | Focus, Gain/Level                  |
| Pan and Tilt      | 360° continuous in pan, ± 80° Tilt |

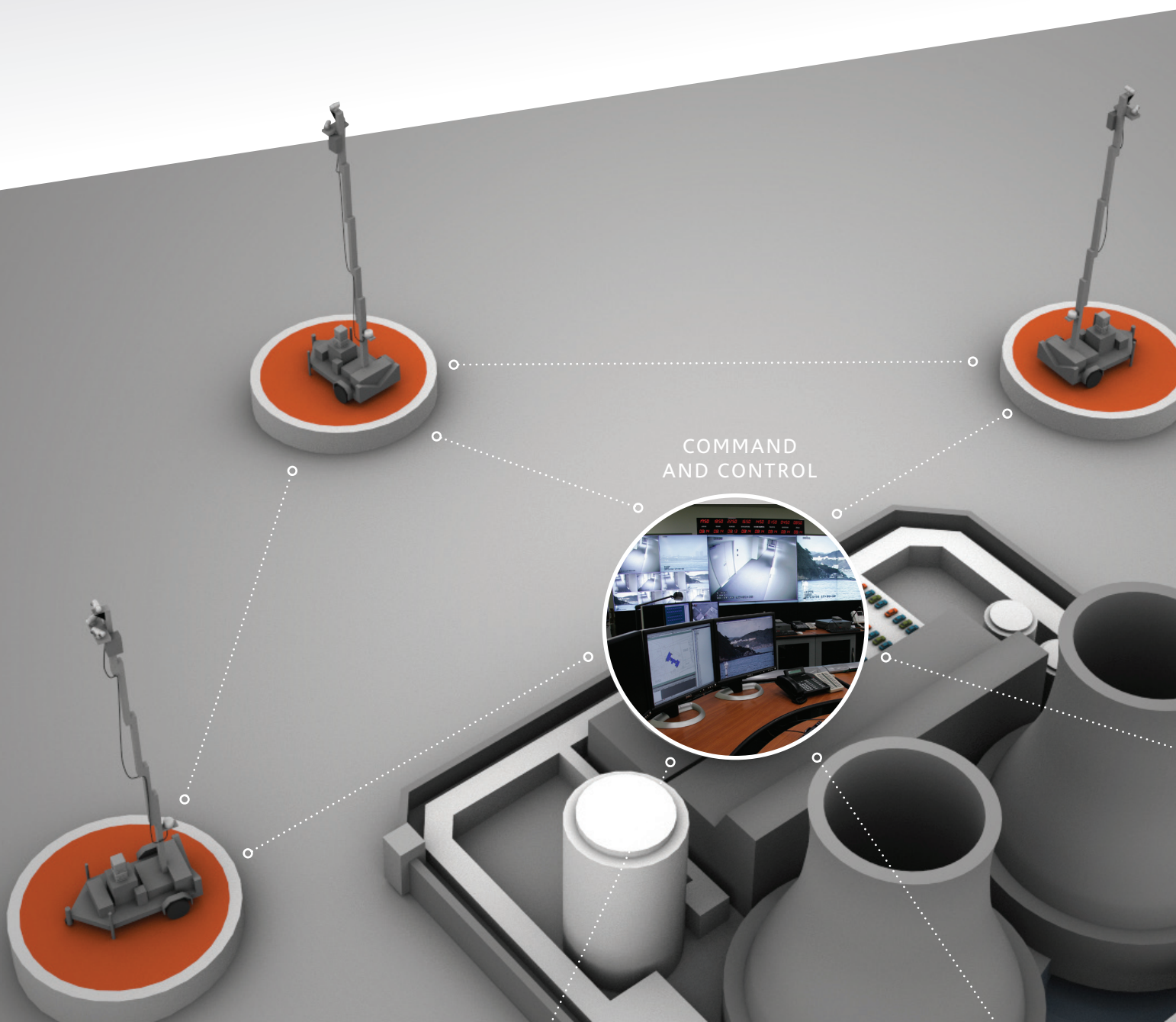
#### RADAR

|                  |   |
|------------------|---|
| Detection Range  | Person Crawling 10m – 125m<br>Person 10m – 350m |
| False Alarm Rate | <3 per 24 hours                                 |
| Beam width       | Azimuth 3.0°, Elevation 3.0°                    |
| Scan rate        | 1 revolution per second                         |
| Frequency        | Ka - band                                       |

# WITH COMMAND AND CONTROL

State-of-the-art command and control software called Cameleon™ provides the backbone for integrated ease of control for multiple cameras, alarms, event management, and video recording. This high-level situational awareness provides security officials critical information on the threat they are dealing with. Knowing where the threat is coming from and where it is headed enables officials to proactively coordinate the appropriate intervention and threat assessment. .

Cameleon™ is scalable and compatible with legacy and new equipment – simultaneously controlling analog and IP inputs. Cameleon supports the seamless integration of new and existing assets to support a larger common operating picture (COP). The Cameleon architecture enables multiple Cerberus platforms, complex privilege hierarchies, and hundreds of sensors and output devices creating the ideal virtual fence solution.



# SIMULATION CENTERS

ICx uses proprietary site design software which takes into account a range of factors (including terrain and line of sight) to establish optimal placement of Cerberus systems. The site survey tool utilizes proprietary GIS tools for “virtual” site analysis and evaluation. The initial design is then used in conjunction with on-site survey capabilities to ensure an optimized solution. The final assessment defines and quantifies the necessary surveillance and sensor solutions which are most advantageous to the specified terrain.

# SUPPORT AND TRAINING

We pride ourselves in providing not only exceptional ‘best in class’ technologies and products but also in delivering the complete customer package including application knowledge, training and maintenance support. Our design and simulation capabilities ensure that we optimize the solution to meet both the performance requirements while maximizing budgets. Our products are designed for reliability, endurance and quality in certified manufacturing facilities around the world.

Having made an investment in an ICx solution we understand the value and importance training and education to realize the full potential and function-

ality of our systems and software. We can design and implement preventative maintenance schedules in order to reduce down time and logistical support programs that deliver the insurance of continuous operation in the most demanding of environments, ensuring 24/7 operability

Our customer support group is there to ensure that your critical assets remain secure, our team will provide the ‘back up’ you need, where ever and when ever, it’s needed.

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