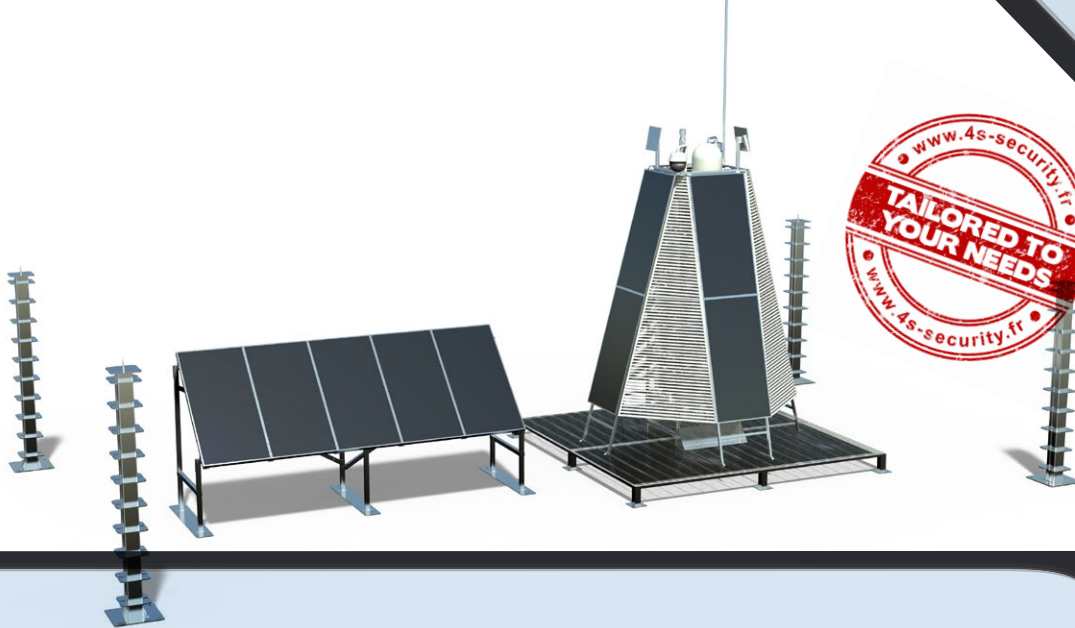


CBRN DETECTION & early warning beacon

FOR AUTONOMOUS CBRN OR HAZMAT HAZARD DETECTION IN THE FIELD



UNIQUE

- Manage full range of CBRN threats
- Fully automatic and remotely operated
- Unlimited energy autonomy
- Long range radio communications
- Redundant communications
- Very long maintenance cycles



RUGGED

- Stackable modules
- Solar panels and louvered panels for power supply, sun and wind protection
- Resistant to extreme weather conditions
- Self-cooled and shock isolated modules



CONNECTED

- Connects to a global system
- Acts as a network relay
- Multi channels mesh
- Redundant communication network



VERSATILE

- Modules and instruments are selected based on the measurement requirements
- Can be tailored to match any specific customer requirements



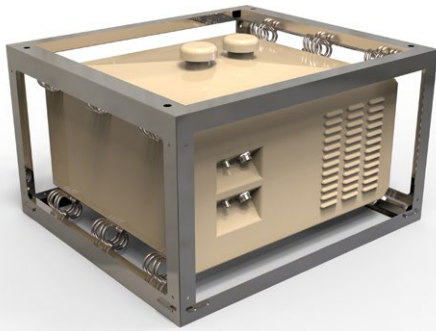
MODULAR

- 1 to 5 different modules
- Autonomous measurement system
- Control & communication module embeds meteorological sensors & self-protection feature
- Biological detector and sampler module
- Chemical detectors module
- Radiological or nuclear detectors module
- Power module for power management
- Installation and energy kit



USER FRIENDLY

- Integration of all CBRN threats sensors in a single pod/beacon
- Ease of maintenance by replaceable modules
- Installation by non CBRN specialist
- Transportation in small vehicles
- Easy field deployment (each module can be carried and installed by hand, with no ground preparation)
- Connection to solar panels, wind generator, fuel generator or local power source



CBRN DETECTION

- Gamma and X radiations: Energy range according to NATO STANAG 4632
- Neutron flux: Energy range according to NATO STANAG 4632
- Alpha and Beta radiations activity from particles in the air: Energy range according to NATO STANAG 4632, sensor option
- Toxic industrial chemicals: Detection of all chemicals listed in NATO STANAG 4632 plus many VOC
- Military or terrorists chemicals warfare agents (CWA): Detection of all agents listed in NATO STANAG 4632
- Military or terrorists biologic warfare agents (BWA): fluorescence detection and aerosol samples collection (1 to 10 µm)

METEOROLOGICAL SENSOR

- Wind speed: 0 to 40 m/s
- Wind direction: 0 to 360 °
- Air temperature: -50°C to +80°C
- Ground temperature: -50°C to +120°C
- Atmospheric pressure: 500 hPa to 1500 hPa
- Relative humidity: 0% to 100%

ENERGY, SELF-PROTECTION AND INSTALLATION

- Solar panels kit, Windmill kit, Fuel generator
- Infrared detection fence, Video surveillance
- Louvered panels for sun and wind protection
- Duckboard and anchoring pile

COMMUNICATIONS

- Up to 5 different media
- Ethernet: 100Mb/s with waterproof RJ45 connection
- Long Range WiFi: 10 Mb/s range up to 20 km
- GSM/GPR/EDGE: 100 Kb/s
Range depending on GSM coverage
- TETRA: 28,8 kb/s
Range depending on TETRA infrastructure
- Satellite with full world coverage (poles in option)

IN USE WEATHER CONDITIONS

- Permanent outside air temperature: -40°C to +55°C
- Temporary outside air temperature : -50°C to +65°C
- Full sun exposure resistance in hot climate conditions
- Wind speed: 0 to 25 m/s in operation, 50 m/s resistant
- Atmospheric pressure: 500 hPa to 1200 hPa
- Altitude: 0 m to 5000 m
- Relative humidity: 5% to 100%
- Rain and marine environment: IP57 and salt resistant
- Sandstorms days per year: Up to 40
- Snow falls: Up to 0,5 m per day

LOCATION AND BEARING

- Beacon bearing: 0 to 360 °
- Beacon location: WGS84 with GPS

ELECTROMAGNETIC SPECIFICATIONS

- Standards of emission : NF EN 61000-6-1 and NF EN 61000-6-3
- Electrostatic discharge immunity: NF EN 61000.4.2
- Immunity to electromagnetic disturbances: NF EN 61000.4.3, NF EN 61000.4.6 and NF EN 61000.4.8
- Radiated electromagnetic disturbances: NF EN 55011

ELECTRICAL SPECIFICATIONS

- Power source: 100 V to 250 V, 50 Hz to 60 Hz
- Autonomy on local batteries: 1h with full functionalities, 12hours with reduced measurement frequency
- Power source provided by: Existing power network, Solar panels kit option, Wind generator kit option, Fuel generator option

MECHANICAL SPECIFICATIONS

- Transport resistant: Air, sea, rail, road and off-road
Complies with NATO AECTP 400 method 401 & 403
- Shock resistant for transport and installation: in accordance with MIL STD 810G, method 516.6 procedures II and IV

DIMENSIONS & WEIGHT

- Total weight: 75 to 400Kg depending on the selected configuration
- Dimensions once installed: 3m high max
- Heavier part for transportation: 70Kg
- Larger part for transportation: 1000x800x600 mm

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