







# FAST DEPLOY SHELTERS AND EQUIPMENT ...to protect people and environment



# i x u s 2 p r o t e c t . c o r

# FAST DEPLOY TEXTILE SHELTERS AND CONTAINERS TO PROTECT PEOPLE AND ENVIRONMENT.

Transport size, deploying time and reliability are the main objectives of NIXUS.

Choose from a variety of pneumatic or solid shelters for temporal or semi-permanent accommodation, field hospitals, emergency medical or industrial purposes. Our team works closely with clients, ready to apply own patented solutions or to design new custom made products to fit to special field purposes. All NIXUS products are engineered and produced in the EU, by ZEPELIN, Ltd.

#### **DEFENSE**

Heavy duty pneumatic shelters for all weather conditions, fulfilling all the material, safety and transportation norms. High pressure inflatable tubes guarantee no risk of structure collapse by temperature fluctuation, wind or snow. Patented multi-tube system is providing a unique multi-level security. All NIXUS products are modular, offering variety of concepts as base camp, mobile hospital, canteene or warehouse.

#### **RESCUE**

Choose out of different NIXUS models to fulfill your special requirements – prefering light inflatable structures for emergency use, middle-weight structures for temporal use or heavy duty structures for semi-permanent personell or refugee accommodation. All products are smart packed for easy transportation including necessary accessories, because each minute counts. Our decontamination tent systems are based on PRO high pressure structure.

#### **INDUSTRY**

A variety of solutions for agricultural sector, mining, construction and other industries. Offering fast deploy protection shelters for on site construction work. A variety of collapsible containers for water, fuel or fertilizers, foldable liquid waste collectors and many more products for industrial use. All made of high tech coated fabrics and materials conforming EU norms.

### CONTENT

#### **INFLATABLE STRUCTURES**

| NIXUS   LITE | Lightweight modular pneumatic tent      | 6  |
|--------------|---|----|
| NIXUS   PGK  | Modular low pressure pneumatic shelter  | 8  |
| NIXUS   PRO  | Modular high pressure pneumatic shelter | 10 |
| NIXUS   RIBS | Large span pneumatic hall               | 12 |
| NIXUS   ECOS | Expandable container shelter            | 14 |

#### **SOLID STRUCTURES**

| NIXUS   STRETCH | Waterproof canopy to fast cover big area | 16 |
|-----------------|--|----|
| NIXUS   QUICK   | Heavy duty foldable pop-up tent          | 18 |

#### **RESCUE EQUIPMENT**

| NIXUS   RESCUE | Serie of products for rescue on water and ice | 20 |
|----------------|---|----|
| NIXUS   TANKS  | Easy storage and logistic                     | 21 |
| ACCESSORIES    | Product accessories                           | 22 |

2

JURAJ BREZAN Founder / CEO

Company ZEPELIN was founded in 1996 as a production company, specialized for production of advertising inflatable objects. Since we've established on the market as a respected producer, who focuses on the quality and our own development. In 2010 we were one of the pioneers bringing pneumatic tents to the advertising and event industry. At the moment our brand AXION is a leading brand

with a comprehensive portfolio of pneumatic products, distributed in over 40 countries worldwide.

In 2016 we decided to move forward and bring our experience with pneumatic tents to other industries. As a specialist in processing of technical textiles, we were fast and efficient in selection of the best materials and suppliers for our project. The goal of our R&D team was to develop high quality innovative products with the best possible ratio of price and reliability, with a focus to easy handling and practical use.

At first we prepared so called must-have models, frequently used by customers in different industries. Now it is a time for us to show our possibilities and bring new solutions to this specific market. After the development and testing period we have completed the patent phase and are preparing serial production of new NIXUS | RIBS inflatable shelter, presented at the DSEI show in London in September 2017. At the same show a study of NIXUS | ECOS , the expandable container shelter using the RIBS technology, is presented to the professionals.

Our ambition, as a specialist in development and production of tents and shelters, is to be the serious player in the industry, with a focus on special high pressure inflatable structures. We believe that our products will become the preferred choice for the armed forces, fire brigades and humanity operations worldwide.





We tested the first prototype of high-pressure tent in 2011 But then other tasks arose and so the whole NIXUS project has been deferred on our shelves for some years.

This is why with deep deployment we started the production of NIXUS in 2016.

We have set high technical standards, aiming to bring highquality and, above all, innovative products to the market.

Our task for 2018 is to prepare the newly-patented expandable container shelter NIXUS | ECOS and to implement it for mass production. So far, everything goes according to our plan.



At ZEPELIN we understand technical textiles and their applications, as well as the technical principles of structures. We are committed to the continuous development and improvement of our products, trying to combine maximum user comfort with a simplicity of service. We are skilled in a production, working to provide the best quality product, supported by perfect customer service.

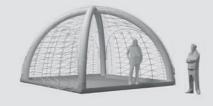
Our company is holder of ISO 9001:2015 quality management certification and 14001:2015 environmental certification.



Our NCAGE code is 1461M.



# Lightweight modular pneumatic tent













NIXUS | LITE is a lightweight modular pneumatic tent for elementary use (first intervention, first aid courses, training ..).

Pneumatic tubes are based on 2-layer system (light, but durable PES fabric + internal TPU bladder), working pressure in tubes is 0,25 bar.

Canopy is made of 500D polyester with PU coating on back side, providing basic waterproofness and B1 certified fire retardancy.

LITE may be packed in a heavy duty compact bag or bagpack, possible to be carried by only one person!

Whole tent is inflatable with electric, accu or hand pump from one inflation point within few minutes, using our patented SIS (smart inflation system).

Whole canopy and side walls are printable by dye sublimation or screen printing technology for eventual promotion purposes or just to put there a logo of organization.

| LITE Model    | Width |        | Length       |              | Length |        | Hei | ght |
|---------------|-------|--------|--------------|--------------|--------|--------|-----|-----|
| NX-LITE-40-40 | 4,0 m | 13' 1" | 4,0 m 13' 1" |              | 2,9 m  | 9' 6"  |     |     |
| NX-LITE-50-50 | 5,0 m | 16' 5" | 5,0 m        | 5,0 m 16' 5" |        | 11' 6" |     |     |









# PGK

# Modular low pressure pneumatic tent

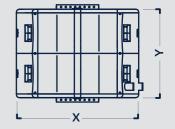












NIXUS | PGK is a modular low pressure inflatable tent for general use (first intervention, base camp, mobile hospital etc.).

Inflatable tubes are made of HF welded heavy duty PVC, working pressure in tubes is 0,30 bar with automatic pressure control system.

The canopy is made of 500D polyester fabric with waterproof PU coating or 1000D both sides PVC coated opaque fabric, both meeting B1 fire retardancy requirements.

1 type is available:

• SI (straight inflatable) type in 2 size modules (5,6m and 6,0m) in various length variants

A variety of accessories as inner liners, sunshade, floor tiles and inner electric and furniture equipment is available with PGK model.

| PGK Model     | Width "X" |         | Length "Y" |        | Height "Z" |        |
|---------------|-----------|---------|------------|--------|------------|--------|
| NX-PGK-56-40  |           |         | 4,0 m      | 13' 1" |            |        |
| NX-PGK-56-63  |           | 401.411 | 6,3 m      | 20' 7" | 2.0.       | 9' 3"  |
| NX-PGK-56-76  | 5,6 m     | 18' 4"  | 7,6 m      | 24' 8" | - 2,8 m    | 9 3    |
| NX-PGK-56-100 |           |         | 10,0 m     | 32' 9" |            |        |
| NX-PGK-60-40  |           | 19' 8"  | 4,0 m      | 13' 1" | - 3,0m     | 9' 10" |
| NX-PGK-60-63  | ( 0       |         | 6,3 m      | 20' 7" |            |        |
| NX-PGK-60-76  | 6,0m      |         | 7,6 m      | 24' 8" |            |        |
| NX-PGK-60-100 |           |         | 10,0 m     | 32' 9" |            |        |





### **PRO**

# Modular high pressure inflatable tent

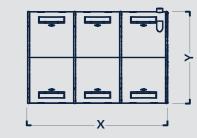












NIXUS | PRO is a modular high pressure inflatable tent system for general or long term use (decontamination unit, base camp, field hospital, refugee camp etc.).

The tough structure of PRO tents is made of heavy duty seamless pneumatic tubes of 6" (150mm) diameter, recommended working pressure in tubes may vary between 3-8 bar (45 - 120 psi). The minimum (collapse) pressure is 1.5 bar, while the safety valves are set to 10 bar. With such a wide pressure range PRO tents are the first choice for application in the harshest conditions from extreme cold areas to the desert and tropical

High pressure tubes of 6" diameter and a way of their connection to the canopy are making PRO tents the most resistant inflatable structure to the strong wind and show load in their category.

The general advantage of high pressure tents in comparison to low pressure solutions is their resistance to temperature fluctuations. There is no necessity of pressure control or air refill.

Recommended interval of internal pressure check is once a week.

The canopy of PRO tent is made of opaque 1000D polyester fabric, both sides PVC coated, well waterproof, fire retardant, suitable to very low temperatures of -50°C, with an optional IR membrane.

Each tent is packed in a strong PVC waterproof bag, with an option of additional transport packing in aluminium or Clip-Lok boxes. The set of installation and repair kit is in a scope of the delivery.

| PRO Model      | Width   |         | Length |         | Height |        |
|----------------|---------|---------|--------|---------|--------|--------|
| NX-PRO-51-40   |         |         | 4,0 m  | 13' 5"  |        |        |
| NX-PRO-51-60   | F 4     | 471011  | 6,0 m  | 19' 7'' | 2.0    | 01.011 |
| NX-PRO-51-80   | 5,1 m   | 16' 9"  | 8,0 m  | 26' 2"  | 2,8 m  | 9' 3"  |
| NX-PRO-51-99   |         |         | 9,9 m  | 32' 6"  |        |        |
| NX-PRO-61-60   |         |         | 6,0 m  | 19' 7'' | 3,3 m  | 10' 9" |
| NX-PRO-61-80   | / 1 === | 201.011 | 8,0 m  | 26' 2"  |        |        |
| NX-PRO-61-99   | 6,1 m   | 20' 0"  | 9,9 m  | 32' 6"  |        |        |
| NX-PRO-61-119  |         |         | 11,9 m | 38' 8"  |        |        |
| NX-PRO-X-51-51 | 5,1 m   | 16' 9"  | 5,1 m  | 16' 9"  | 3,6 m  | 11' 7" |
| NX-PRO-X-61-61 | 6,1 m   | 20' 0"  | 6,1 m  | 20' 0'' | 4,3 m  | 14' 1" |



### RIBS

## Large span high pressure inflatable hall













NIXUS | RIBS is a high pressure pneumatic hall of large span, using patented RIBS technology (Rigid Inflatable Beam Structure). It is combining advantages of rigidity of solid structure halls with installation and transportation flexibility of inflatable halls.

RIBS structure system is based on multipled heavy duty seamless pneumatic tubes of 6" diameter, pressurized to 3-8 bar (45 – 120 psi). After inflation the structure remains extremely rigid, resistant to strong wind and temperature fluctuations, able to withstand much higher load as other known inflatable beams of similar size parameters. Besides to its load resistance, multi-tube RIBS system is the safest inflatable technology on the market. It is possible to control the pressure from the whole system as one air chamber up to each single tube in an arch. In a case of eventual air leak in one tube the others are able to keep the shape without risk of structure collapse.

NIXUS | RIBS is designed for general or long term use (field hospital, briefing room, storage hall, maintenance hangar etc.). It is an ideal solution as UAV hangar too.

The canopy of RIBS hall is made of opaque 1000D polyester fabric, both sides PVC coated, well waterproof, fire retardant, suitable to very low temperatures of -50°C, with an optional IR membrane.

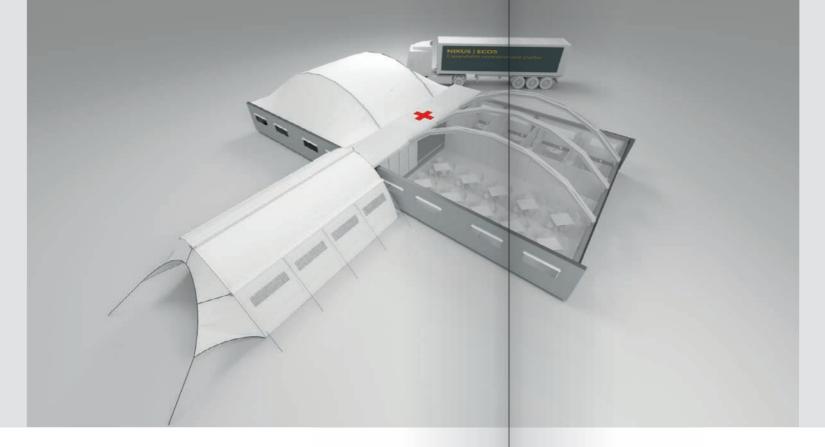
For easier handling the hall may be split into more segment. Each segment is packed in a strong PVC waterproof bag, with an option of additional transport packing in Clip-Lok boxes.

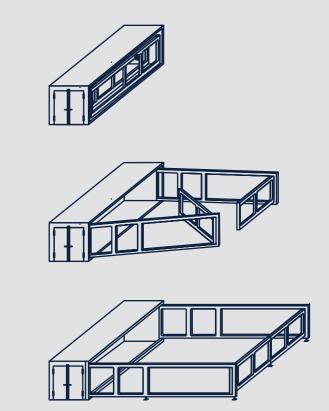
| RIS Model       | Wi     | dth     | h Leng |         | Length |        | Height |  |
|-----------------|--------|---------|--------|---------|--------|--------|--------|--|
| NX-RIBS-85-88   |        |         | 8,8 m  | 28' 10" |        |        |        |  |
| NX-RIBS-85-116  | 8,5 m  | 27' 10" | 11,6 m | 38' 0"  | 4,3 m  | 14' 1" |        |  |
| NX-RIBS-85-144  |        |         | 14,4 m | 47' 4'' |        |        |        |  |
| NX-RIBS-105-116 |        | 34' 5"  | 11,6 m | 38' 0"  | 5,3 m  | 17' 5" |        |  |
| NX-RIBS-105-144 | 10,5 m |         | 14,4 m | 47' 4'' |        |        |        |  |
| NX-RIBS-105-172 |        |         | 17,2 m | 56' 6"  |        |        |        |  |
| NX-RIBS-120-144 |        |         | 14,4 m | 47' 4'' |        |        |        |  |
| NX-RIBS-120-172 | 400    | 201 (11 | 17,2 m | 56' 6"  | ( 0    | 401011 |        |  |
| NX-RIBS-120-200 | 12,0 m | 39' 6"  | 20,0 m | 65' 9"  | 6,0 m  | 19' 8" |        |  |
| NX-RIBS-120-229 |        |         | 22,9 m | 75' 0"  |        |        |        |  |



### **ECOS**

# Expandable container shelter





New shelter system, based on expansion of 20ft or 40ft freight container to the size of up to 300sqm of roofed area. The principle of this patented solution is horizontal tilting of frames at both long sides of container. After tilting of main and supporting frames, separate halls at both sides of container are made, together with an empty container creating three separate spaces.

While the container itself shall be used as a communication corridor, the halls are supposed to work as an accommodation space, an ambulance, briefing hall, as a canteene, warehouse etc.

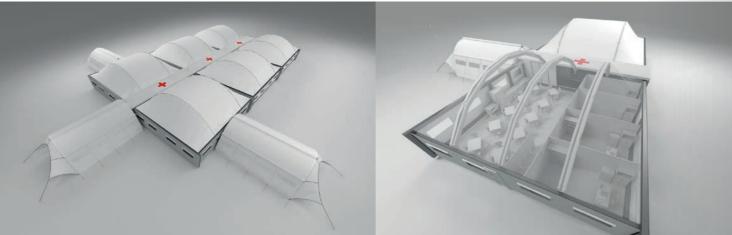
The roof of ECOS shelter is based on inflatable high pressure NIXUS | RIBS system, which creates rigid inflatable beams over the area and supports the membrane roof. The floor is made of heavy duty, antislippery PVC coated fabric, which's perimeter is fixed to the walls and creates a safe barrier to the water or animals. Tilting frame walls are covered with composites panels. Windows, evacuation doors, electric installation and optionally a water distribution may be the part of side walls as a scope of the delivery.

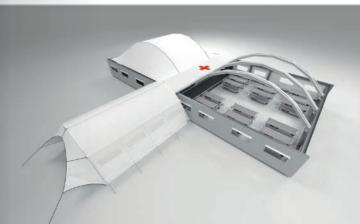
Electric aggregate, air conditioning units, as well as the floor tiles may be transported directly in a container as one compact transport unit too. An estimated time of the installation of the biggest ECOS 40-2 shelter complex from the moment of truck stop is up to four hours by two trained persons.

NIXUS | ECOS is a modular system. It is possible to add other ECOS units to the back (connecting freight containers on short side) or by the side (connecting one expanded hall to another). It is also compatible with NIXUS | PRO shelters to be connected via tunnels, creating a complex modular infrastructure.

NIXUS | ECOS is a hybrid fast deploy shelter system for medium or long term use, preferably as a field hospital or accommodation system.

| ECOS Model   | Width  | Length        | Height |
|--------------|--------|---------------|--------|
| NX-ECOS-20-1 | 8,1 m  | 6,1 m (20ft)  | 4,2 m  |
| NX-ECOS-20-2 | 13,8 m | 6,1 m (20ft)  | 4,2 m  |
| NX-ECOS-40-2 | 26,0 m | 12,2 m (40ft) | 5,0 m  |





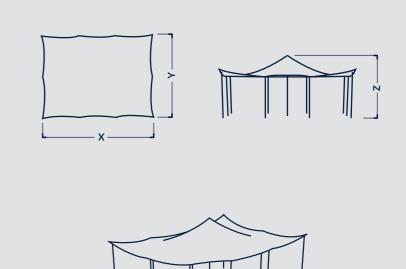


# STRETCH

Waterproof canopy to fast cover big area







STRETCH is using a special knitted fabric, which is double side coated with PVC/PU composition. All seams are HF welded, providing perfect resistance and water proofness.

This shelter is independent of frame, adaptive to any terrain relief. It may be erected in minutes and create a shade and water protection for people or material on an area of up to 300 sqm.

Its canopy is supported by vertical poles, which are stretching fabric to create sloped surface.

Edges of stretch canopies are fastened to the ground spikes by ropes and cleats.

It is an ideal solution for rescue people collection, field storage, field canteene, maintenance work etc.

| STRETCH Model    | Wi     | Width Length Heig |        | Length |       | ight   |
|------------------|--------|-------------------|--------|--------|-------|--------|
| NX-STRET-45-60   | 4,5 m  | 14' 9"            | 6,0 m  | 19' 7" | 3,5 m | 11' 6" |
| NX-STRET-60-80   | 6,0 m  | 19' 7"            | 8,0 m  | 26' 2" | 3,7 m | 12' 4" |
| NX-STRET-80-100  | 8,0 m  | 26'2"             | 10,0 m | 32' 9" | 4,0 m | 13' 1" |
| NX-STRET-90-120  | 9,0 m  | 29' 6"            | 12,0 m | 39' 4" | 4,0 m | 13' 1" |
| NX-STRET-100-150 | 10,0 m | 32' 9"            | 15,0 m | 49' 3" | 4,0 m | 13' 1" |
| NX-STRET-150-200 | 15,0 m | 49' 3"            | 20,0 m | 65' 6" | 5,0 m | 16' 5" |

Custom sizes are available on request.

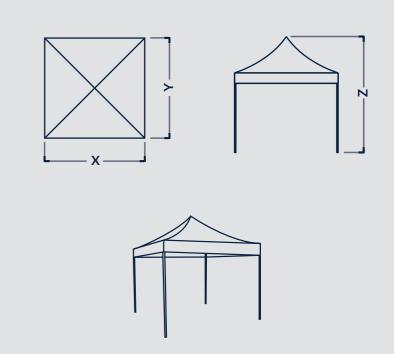


# QUICK

# Heavy duty foldable pop-up tent







Heavy duty variant of foldable pop-up tent for instant outdoor work (fire and rescue first intervention, pipeline repair, road work, field service ..).

Foldable frame is made of 50mm aluminium hexagonal vertical profiles and 36x18mm cross bars.

Canopy is made of strong 500D polyester with PU coating on back side, providing basic waterproofness and B1 certified fire retardancy.

Complete tent is packed in one compact wheeled bag.

Whole canopy and side walls are printable by dye sublimation or screen printing technology for eventual promotion purposes or just to put there a logo of organization.

For work in a traffic, there are reflective canopies and walls available in orange or green color (QUICK RF), with optional reflective straps or dots.

In a case when bigger surface needs to be covered, it is easy to connect two or more QUICK structures together.

The gaps between tents are protected by textile gutters, draining water to the perimeter of covered area.

| QUICK Model | Width |        | Length |        | Height |        |
|-------------|-------|--------|--------|--------|--------|--------|
| NX-QM3030   |       |        | 3,0 m  | 9' 10" |        |        |
| NX-QM3045   | 3,0 m | 9' 10" | 4,5 m  | 14' 9" | 3,4 m  | 11' 2" |
| NX-QM3060   |       |        | 6,0 m  | 19' 7" |        |        |
| NX-QM4040   |       |        | 4,0 m  | 13' 5" |        |        |
| NX-QM4060   | 4,0 m | 13' 1" | 6,0 m  | 19' 7" | 3,7 m  | 12' 2" |
| NX-QM4080   |       |        | 8,0 m  | 26' 2" |        |        |













- RBT is a product for professional rescue, where the buoyancy is created by tube, inflated around
  the perimeter of flat bottom, made of heavy duty dropstitch fabric. For more safety there are three
  independent air chambers.
- Openings, created between inflatable tubes and the bottom in the front and back part of the boat are
  allowing persons to easy enter the boat from water. The strong rope is placed around whole perimeter of
  boat too.
- Detachable sledge blades are helping to move the boat on ice.
- An engine may be attached to the boat too.

| RBT         | Widt   | h "X" | Length "Y" |         | Height "Z" |        | Weight |        |
|-------------|--------|-------|------------|---------|------------|--------|--------|--------|
| rescue boat | 1,27 m | 4' 2" | 4,9 m      | 16' 0'' | 0,72 m     | 2' 4'' | 20 kg  | 44 lbs |

#### **RBD** - Rescue board



- RBD is an easy to use and extremely useful tool based on high quality dropstitch, TPU coated antislippey
  fabric, mainly focused to beach guards, but its small packed size is allowing professional rescue teams to
  add it into their inventory too. An inflation takes just a minute.
- There is a set of strong handles placed on both sides of the board, helping people to catch the board.
- The board may be personalized by colors and design.

| RBT         | Widt   | Width "X" |       | Length "Y" |        | Height "Z" |       | Weight |  |
|-------------|--------|-----------|-------|------------|--------|------------|-------|--------|--|
| rescue boat | 1,27 m | 4' 2"     | 4,9 m | 16' 0''    | 0,72 m | 2' 4''     | 20 kg | 44 lbs |  |



- RPH is a modular product, able to be interconnected to create a long path, or to use it separately as floating platform.
- Thanks to the rigidity of pressurized dropstitch fabric, it is very stable, not bending.
- The top of the path is equipped with antislippery EVA foam.
- Corner handles for easier manipulation and perimeter ropes are the standard part of each unit.
- Same as RBT boat, RPH path is an optimum solution for combined water and ice rescue, well suitable to the muddy terrain too.
- RPH is normally available in one standard size, contact us for your customized model.

| RBT         | Width "X" |       | Length "Y" |         | Height "Z" |        | Weight |        |
|-------------|-----------|-------|------------|---------|------------|--------|--------|--------|
| rescue boat | 1,27 m    | 4' 2" | 4,9 m      | 16' 0'' | 0,72 m     | 2' 4'' | 20 kg  | 44 lbs |



**TANK** 

Collapsible tanks of different materials to store wide range of liquids:

- PVC / EVA based containers for drinking and waste water storage
- EVA / TPU based containers for manure and fertilizers
- TPU based containers for hydrocarbons storage

Different way of use (in different sizes from 1m3 up to 300m3):

- Collapsible tanks for static use
- Collapsible tanks for dynamic use (truck, container)
- Open onion tanks and decontamination basins

Our customers may choose well tested lighting made by WESTELETTRIC or SETO. From shock resistand fluorescent lamps, through professional LED light up to high tech "BIOLIGHT TRIPLE WAVELENGHT" technology by SETO.



#### **FURNITURE**

Variety of light and durable furniture equipments as foldable beds, chairs and tables, outdoor furniture, etc.



#### **FLOOR**

A surface system widely used by many key NATO forces, for military helipads, storage, shelter flooring, workshops and access-ways. Rola-Trac™ products are developed with the user in mind, making it one of the most straightforward temporary flooring/matting systems available. The design allows rapid deployment, with the minimum of manpower and no specialist tools.



### Dantherm®



VA-M15MKII TENT HEATING



**VA-M40MKII TENT HEATING** 



AC-M5W CONTAINER COOLING
AC-M5MKII CONTAINER COOLING



**AC-M16 TENT COOLING** 



AC-M18 TENT COOLING
AC-M11 TENT COOLING



**AC-M18 CBRN TENT COOLING** 

prot

