The SOLARΣSHIELD – pronounced solarsigmashield – is a simple and affordable solution for solar heat load reduction and multispectral signature management. It can be designed for and installed on any system operating in harsh climate.

**APPLICATIONS**
- Vehicles
- Weapon systems
- Command and control centres
- Tanks and reservoirs
- Sea containers and shelters
- Electronic systems (EO modules, control units, etc.)
- Any fixed or mobile system operating in harsh climate

**KEY CHARACTERISTICS**
- Modular and customizable
- Easy to install and to remove
- Robust and long-lasting
- Proven in battlefield conditions
- High fire resistance (ISO 6940)
- Non-slip/skid add-ons for walking areas
- No interference with host system
HEAT LOAD REDUCTION

SOLARΣSHIELD is a patented fabric designed and tested by Defence Research and Development Canada, battlefield proven by the Canadian Forces that allows a significant solar heat load reduction on systems, by natural air convection and artificial shadow.

- Significant reduction of heat stress on personnel and equipment
- Substantial air conditioning power savings (fuel/electricity)
- Enhancement of system reliability and expected life time
- Internal system temperature reduction of up to 25°C

Thermal images with and without SOLARΣSHIELD during daytime (left) and night time (right)

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Time (hours)</th>
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Domain images with (left) and without (right) SOLARΣSHIELD

SIGNATURE MANAGEMENT

SOLARΣSHIELD is a layered fabric system allowing multi-spectral signature management against thermal, visual, radar and ultraviolet detection. SOLARΣSHIELD is customized and tailored specifically to fit each system and operational requirements.

- Thermal
  - Significant reduction of thermal signature
  - Remarkable thermal adaptation to environment temperature variations (e.g. sunset/sunrise)

- Visual camouflage
  - Wide range of camouflage fabrics available in various colours and patterns, plain or textured
  - Selected and customized to environment of operation and customer requirements

- Radar
  - Blended radar signature reduction of up to 10 dB
  - Customized to system geometry and opposing forces detection technology

- Ultraviolet
  - Adaptable to snowy environments

Thermal images with and without SOLARΣSHIELD during daytime (left) and night time (right)

Visual camouflage: SOLARΣSHIELD being trialed as a prototype

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