

Modular Air-Conditioning Solutions



Air-Conditioning
for
Mobile Deployment

Modular Air-Conditioning Solutions

As part of the ever-changing scenarios and locations of armies, it is essential to protect modern IT hardware components against external climatic influences.

Usually, 19" commercial-off-the-shelf (COTS) products are used for mobile communication in operation centres. This hardware is not designed for military applications and resulting strong mechanical forces or harsh environmental conditions. For this reason, it is necessary to cool or heat these components in a specific way in order to meet the requirements of the most diverse operational scenarios.

Our reliable and climate-resistant CLION® air-conditioning modules were designed for outdoor equipment. They consist of individual functional units that amount to a high-performance air-conditioning module when assembled in the corresponding configuration.

Advantages of the CLION® air-conditioning modules:

1

Certified acc. to
MIL-STD 810 G CE compliant

3

Maintenance levels (MES 1+2)

2

Meets the standard for
equipment cases, VG 95447-1

4

Individual customization is possible

CLION® SK 25 “Micro”

The intelligent air-conditioning module CLION® SK25 “Micro” is currently the smallest modular air-conditioning unit with micro-compressor technology in our product portfolio. The robust micro air-conditioning system meets the requirements for smaller and lighter systems in deployment.

Technical Specifications:

- For environmental temperatures from -30°C to +60°C
- Cooling capacity at +60°C: 250 Watt
- Power supply: 12V / 24V DC / 12,5A
- Dimensions (WxDxH): 456x206x291 mm
- Weight: 12.3 kg



CLION® SK 140 “Backpack”

The modular air-conditioning module CLION® SK 140 “Backpack” was developed for tropical applications in ambient temperatures up to +60°C. It is equipped with a powerful condenser fan and an evaporation heat exchanger device. It offers intelligent cooling, heating and dehumidification of 19” components starting from 6 height units.

Technical Specifications:

- For ambient temperatures between -30°C and +60°C
- Cooling capacity at +60°C: 1.000 - 1.400 Watt
- Optional: BSI authorisation acc. to Zone 1
- Power supply: 230V AC, 5A
- Dimensions (WxDxH): 516x687x338 mm
- Weight: approx. 53 kg without case



CLION® SK 340 “Cooling Cube”

The CLION® SK 340 “Cooling Cube” is a reliable and resilient air-conditioning module that was introduced by the German Armed Forces in the project “Deployable Network“. It offers intelligent cooling and heating of 19" components in a dual-circuit system. Functional inspection, simple maintenance or repair work can be conducted by the user on site (MES 1+2).

Technical Specifications:

- For ambient temperatures between -33°C and +44°C
- Cooling capacity at +60°C: 3000 Watt
- Optional: BSI authorisation acc. to Zone 1
- Power supply: 230V AC, 10A
- Dimensions (WxDxH): 510x1030x485 mm
- Weight: approx. 60 kg without case



CLION® SK 400 “Cooling Cube”

The air-conditioning module CLION® SK 400 “Cooling Cube” is an advancement of the CLION® SK 340. The high-performance system was introduced to the German Armed Forces in the project “Regeneration VANBw, 1. Los” and offers intelligent cooling and heating of 19" components. The CLION® SK 400 is designed for strong mechanical forces and harsh environmental conditions. It meets the maintenance levels 1 and 2. Due to the efficient air distribution via a tube system, it operates quietly and ensures reliable operation in temperatures ranging from -33°C to more than +59°C.

Technical Specifications:

- For ambient temperatures between -33°C and over +59°C
- Cooling capacity at +61°C: 4.000 - 4500 Watt
- Optional: BSI authorisation acc. to Zone 1
- Power supply: 230V AC / 18A
- Dimensions (WxDxH): 510x1030x485 mm
- Weight: approx. 75 kg without case



CLION® CH 1 “Water Chiller”

The CLION® CH 1 is the first water-based air-conditioning system for mobile applications. It offers cooling performance at ambient temperatures between -30°C to +60°C and operates exceptionally quietly. The system is designed for remote operation and can be operated with cold water or via thin water tubes. To increase the cooling capacity, several air conditioners can be connected in series. Clion CH 1 complies with protection class IP68, the water tubes have leakage-free quick-release couplings and a water flow rate of 1m³/h.

Technical Specifications:

- For ambient temperatures between -30°C and +60°C
- Cooling capacity at +60°C: 1000 Watt
- EMC resistant against components requiring cooling
- Power supply: 230V AC / 24V DC
- Water flow rate approx. 1m³/ h
- Protection class IP 68





www.steep.de

Mobile Networks

Tel.: +49 228 6681 - 169

Fax: +49 228 6681 - 777

E-mail: mobile.netze@steep.de

Justus-von-Liebig-Strasse 18
53121 Bonn, Germany