

Mission Critical Cooling



TROX[®]AITCS
Advanced IT Cooling Systems



The art of handling air

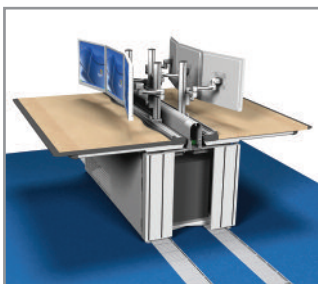
For over 55 years, TROX has been producing and marketing components and systems for indoor air-conditioning and ventilation. Due to its intensive research and development, it is considered to be a pioneer in this area all over the world.

TROX Advanced IT Cooling Systems (AITCS) offers specialised cooling solutions for server rooms and dealer desks on trading floors.

AITCS offers the market a choice of their patented, 'electrically benign' liquid CO₂ systems for risk averse clients or, a chilled water (CHW) alternative for those users who prefer to adopt traditional CHW technologies.



Blade Server and Dealer Desk Cooling



In-Desk PC Cooling

The system provides a High Density liquid cooling solution for trader desks. The solution cools the micro-climate within the desk PC chamber. The co-ordinated cooler/desk approach ensures optimum user comfort.

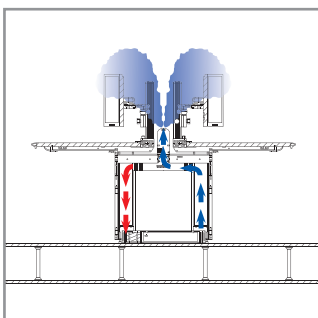
Product:

CO₂OLdesk™
AQUAdesk™

Cooling Medium:

CO₂
CHW

- Cooling capacity 2kW/unit
- Temperature (flow):
 - CO₂ 14°C
 - CHW 14°C min
18°C max
- Noise level NR 30/35



In-Desk PC and Monitor Cooling

To complement the PC cooling system, monitor cooling is also available. An active supply diffuser provides direct cooling to monitors.

Product:

CO₂OLdesk™
AQUAdesk™

Cooling Medium:

CO₂
CHW

- Cooling capacity 2.6kW/unit
 - Monitor cooling 800W
 - PC cooling 1800W
- Temperature (flow):
 - CO₂ 14°C
 - CHW 14°C min
18°C max
- Noise level NR 35/38

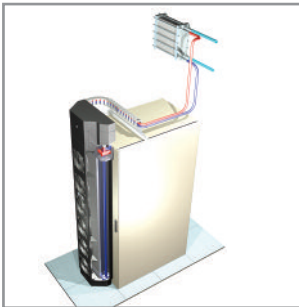


High Density Rack Cooling

High capacity, open architecture liquid cooling units are compatible with all rack types and sizes, designed to satisfy all levels of redundancy.

Product:	Cooling Medium:
CO ₂ OLrac™	CO ₂
AQUArac™	CHW

- Cooling capacity:
CO₂ 30 to 40kW
CHW 30 to 40W
- Rack width: 600mm/800mm
- Rack height: 42U up to 47U
- Temperature (flow):
CO₂ 14°C typical
16°C max
CHW 14°C min
18°C max

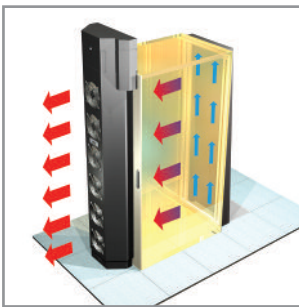


'Pump-less' High Density Rack Cooling

The pump-less system harnesses the server heat to create a thermosyphon CO₂ cycle. It is the simplest form of non-water cooling for Medium & High Density equipment racks.

Product:	Cooling Medium:
CO ₂ OLrac™	CO ₂ (secondary)
CO ₂ OLflow™ condenser	CHW (primary)

- CO₂OLrac™ capacity 2 x 20kW
- CO₂OLflow™ capacity 40kW
- Rack width: 600mm/800mm
- Rack height: 42U up to 47U
- Temperature (flow):
CO₂ 14°C
CHW 6/12°C



Scalable Medium to High Density Rack Cooling

AIRbridge™ can provide 3 alternative functions:

- Hotspot fan assisted ducted air cooling up to 10kW
Inlet hood prevents exhaust air re-circulation.
- Fan assisted extraction to compliment cold aisle containment up to 15kW.
- High Density cooling (via drop-in coil).

Product:	Cooling Medium:
AIRbridge™	Air
+ Drop-in coil	CO ₂ /CHW

- Cooling capacity:
Air 10 to 15kW
CO₂ (pumped) 30 to 40kW
CO₂ (thermosyphon) 20kW
CHW 30 to 40kW
- Supply air inlet temp 17°C
- Rack width: 600mm/800mm
- Rack height: 42U up to 47U



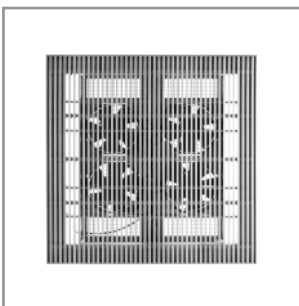
CO₂ Plant

The packaged CO₂ pumping unit complete with CO₂ storage vessel and CHW heat exchanger for indoor or outdoor use.

Product:	Cooling Medium:
*CO ₂ OLpac™	CO ₂ (secondary) CHW (primary)

**Please see website or contact us for other plant options*

- Cooling capacity:
100kW up to 600kW
- Redundancy: N; N+1; N+N
- Temperature (flow):
CO₂ 14°C typical
16°C max
CHW 6/12°C typical
10/14°C max



Computer Room Floor Grille

Floor grille types AFG & CFG are specifically designed for mounting in computer room raised access floors, where load and damage resistance are of the utmost importance. The CFG fan deck will provide hotspot cooling.

Product:	Description:
AFG	Air
CFG	Air (fan powered)
CFG-D	Air (fan & angled discharge)

- Size: 600mm x 600mm
- Tile depths 25mm to 50mm



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