



IT Air Conditioning Units

Modern | Flexible | Effective | Energy Saving

CONTEG

CoolTeg Plus and CoolTop overview

	CoolTeg Plus CW	CoolTeg Plus DX	CoolTeg Plus XC	CoolTop	
Installation	Between IT racks			On top of IT rack	
Coolant	Water/glycol	R410A	R410A	Water/ glycol /R410A	
Piping size	Unlimited	Limited by maximal distance and elevation	Limited by maximal distance and elevation	Unlimited	
Application	> 100 kW	< 100 kW	< 200 kW	Min. 4 IT racks & > 30 kW	
Occupied floor area	0.3 m ²	0.3 m ²	0.4 m ²	0	
Cooling capacity*	28 kW (CW30)	7 kW (DXSmall)	42 kW (XC40)	CW	DX
	38 kW (CW30 Super C)	12 kW (DX12)		37 kW (CT2)	42 kW (CT2 DX)
	61 kW (CW60)	20 kW (DX20)		49 kW (CT3)	45 kW (CT3 DX)
Suitable for	Any type of data center Applications with cooling capacity over 100 kW Cooling systems with chilled water source Free-cooling systems High density area	Any type of data center Small applications – e.g. Modular closed loops in offices Server rooms with total cooling capacity up to about 100 kW	Mid-size application (cooling capacity up to 200 kW) Extreme ambient temperatures (from -45 °C up to +55 °C) Environments requiring low noise level of outdoor unit	Open Aisles Contained Cold Aisle Contained Hot Aisle Clients focused on energy saving	

* Nominal capacity under these conditions: air temperature in hot zone 35 °C, water temperature 6/12 °C (CoolTeg), resp. 10/15 °C (CoolTop), without condensation



CoolTeg Plus

CoolTeg unit represents a family of precision cooling units specifically designed for easy integration between IT racks. These air conditioning units – with various cooling principles, sizes and capacities – are Conteg's main product line for effective targeted cooling, from server rooms to large data centers.



Main advantages

Installation between IT racks

Delivers cold air directly to server racks

Raised floor not needed

Very low power consumption due to high-efficient centrifugal EC fans, modern components and control software

Modern "server-friendly" airflow management

Simple communication with administrator

CoolTeg Plus CW

CoolTeg Plus CW chilled water unit is designed to be connected to any type of chilled water system.



Main advantages

Unlimited number of units connectible to any single chilled water system

Free-cooling system saves significant amount of power

Water temperature variable during the year, saving energy while controlling humidity level

Variable chiller types fulfill any requirements

Unlimited piping length between indoor and outdoor unit

Operation water temperature between 6 °C and 30 °C



CoolTeg Plus **DX**

CoolTeg Plus DX unit works on the direct expansion principle, with refrigerant circulating between one indoor and one outdoor unit (equipped with a compressor).

Main advantages

Keeps data center free of water

Independent indoor and outdoor unit system ensures the whole system's redundancy

Easy installation and additional capacity expansion

Ecological refrigerant R410A

Stepless cooling capacity control



CoolTeg Plus **XC**

CoolTeg Plus XC in-row unit is based on the direct expansion principle. A compressor is integrated inside the indoor unit, which is connected to its outdoor condenser.

Main advantages

Remarkable energy efficiency and stepless cooling capacity control

Operation in extreme temperatures (-45 °C up to +55 °C)

Stepless cooling capacity control in range 20 to 100 %

Compressor safely positioned inside the data center

Immediate response to actual heat loads

Variable design of outdoor unit (with regards to temperature, space, noise level, etc.)

Low noise level of outdoor unit

CoolTop

CoolTop cooling unit is specially designed for easy installation on the top IT racks, and is perfectly suitable for effective targeted cooling of server rooms and large data centers.



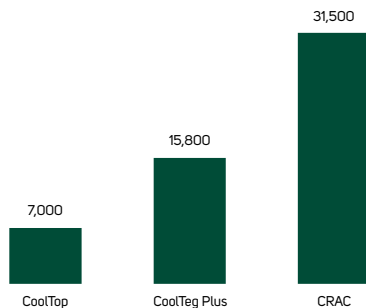
Main advantages

- Installation on top of IT racks
- Does not occupy any floor area
- Brings cold air directly to cold zone in front of server racks
- Extremely low power consumption due to large heat exchanger and EC axial fans
- Allows flexibility of room arrangement
- Raised floor unnecessary for air distribution
- Easy installation in contained hot or cold aisle
- Compatible with CONTEG IT racks
- Comes with a wide range of accessories
- Now available in DX version

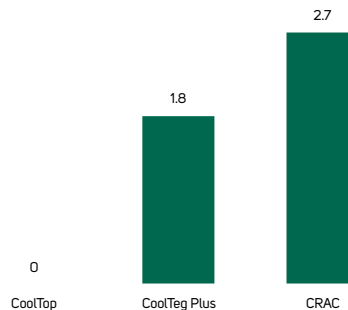
Save your money with our CoolTop system

A server room features 16 IT racks (600x1000 mm) in a contained cold or hot aisle arrangement. The temperature in front of the servers is 25 °C and the hot zone maximum temperature is 35 °C. Chillers with free-cooling function bring 6/12 °C cold water. The total cooling capacity is 96 kW (6 kW per rack), with N+1 redundancy.

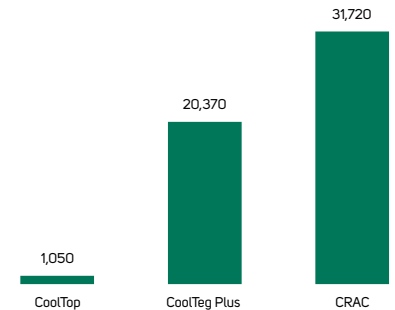
Annual power consumption [kWh]



Floor area usage [m²]



Annual costs [€]



Assuming the cost of energy at 0.15 €/kWh and the cost of 1 rack space (0.6 m²) in a DC 500 €/month.



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