



 BROCHURE

COOLING UNITS FOR IT

↳ Modern, flexible, effective, energy saving

WE ARE CONTEG

↳ Leading Producer of IT, Data Center, and Industrial Solutions

Our purely Czech manufacturing company was founded in 1998. Today, we are one of the leading manufacturers of comprehensive solutions in the fields of data centers, telecommunications, and industry. We provide global sales and technical support and have manufacturing plants equipped with the latest technologies.

Individual cooling units from the targeted cooling portfolio are an integral part of our comprehensive Data Center Solutions. Our product range includes In-Row, Above-Rack, In-Rack, and Room-Cooling cooling units for IT, as well as all types of individual cooling units for industrial and outdoor solutions – roof-mounted, wall-mounted, and side-mounted. We also offer ventilation units and other airflow management products, which are essential for the efficient cooling of installed technology.

📁 COMPLETE PORTFOLIO

Cooling units for IT, industry and outdoor solutions

📁 HIGH QUALITY CONSTRUCTION

Latest technology and components, environmentally friendly refrigerants

📁 VARIABILITY OF USE

Cooling units for all types of applications: In-Row, Above-Rack, In-Rack and Room-Cooling; roof-mounted, wall-mounted, and side-mounted

📁 CUSTOMIZED SOLUTIONS

Specific solutions according to customer's requirements

📁 ENERGY-SAVING SOLUTIONS

Unique innovations with low operating cost



↳ Extended 5-year warranty for CONTEG cooling units

Comparison	CoolTeg				CoolTop		CoolSeven	CoolRAC		
	CW	DX	XC	DF	CW	DX		CW	XC	DF
INSTALLATION										
Between IT racks	✓	✓	✓	✓	–	–	–	–	–	–
On top of IT racks	–	–	–	–	✓	✓	–	–	–	–
Inside of 19" racks	–	–	–	–	–	–	✓	–	–	–
Farther from IT racks	–	–	–	–	–	–	–	✓	✓	✓
COOLING MEDIUM										
Water/glycol	✓	–	–	–	✓	–	–	✓	–	–
R410A	–	✓	✓	–	–	✓	✓	–	✓	–
R410A + water/glycol	–	–	–	✓	–	–	–	–	–	✓
APPLICATION										
Smaller	✓	✓	✓	✓	✓	✓	✓	–	–	–
Medium	✓	–	✓	✓	✓	✓	–	✓	✓	✓
Bigger	–	–	–	–	–	–	–	✓	✓	✓
OCCUPIED FLOOR AREA (IN DATA CENTER)										
None	–	–	–	–	✓	✓	✓	–	–	–
Small	✓	✓	✓	✓	–	–	–	–	–	–
Large	–	–	–	–	–	–	–	✓	✓	✓
NOMINAL COOLING CAPACITY Air temperature in hot zone: 35 °C; water temperature of 6/12 °C (for CW units), no condensation.										
7-19 kW	–	DXSmall DX30	–	–	–	–	CoolSeven	–	–	–
20-39 kW	CW30	DX30	XC30	DF	CoolTop2	CoolTop2 CoolTop3	–	CoolRAC XC CoolRAC DF		
40-100 kW	CW30 SuperC CW60	–	XC40	–	CoolTop3	CoolTop2 CoolTop3	–	CoolRAC CW CoolRAC XC CoolRAC DF		
SUITABLE FOR										
Smaller applications – e.g. Modular Closed Loop	–	✓	–	✓	–	–	✓	–	–	–
High outside temp.	–	–	✓	–	–	–	✓	–	✓	–
Cooling system with a cold-water source	✓	–	–	–	✓	–	–	✓	–	–
No water in a data center	–	✓	✓	–	–	✓	–	–	✓	–
Free-cooling	✓	–	–	✓	✓	–	–	✓	–	✓

CoolTeg

CoolTeg In-Row Cooling Units are specifically designed for easy integration between IT racks. With various cooling principles, sizes and capacities – they are our main product line for effective targeted cooling, from server rooms to large data centers.

↳ Main advantages

- ✓ High cooling capacity
- ✓ Does not require a raised floor
- ✓ Ease of expandability of the data center
- ✓ Supplies cold air directly to the front of the servers
- ✓ Very low power consumption thanks to EC fans and control software
- ✓ Small occupied floor area
- ✓ Modern and user-friendly control system
- ✓ Flexibility of room arrangement
- ✓ Perfect compatibility with CONTEG IT racks
- ✓ Wide range of accessories

↳ Suitable for

- ✓ Contained Hot Aisles
- ✓ Contained Cold Aisles
- ✓ Open Aisles
- ✓ Mini Data Centers



CoolTeg CW

CoolTeg CW In-Row Cooling Unit is designed to be connected to any type of chilled water.

↳ Main advantages

- ✓ Virtually unlimited number of indoor units per hydraulic circuit
- ✓ 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
- ✓ Operation water temperature between 6 °C and 30 °C



CoolTeg DX

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

↳ Main advantages

- ✓ No water in data center
- ✓ Independent indoor and outdoor unit system ensures the whole system's redundancy
- ✓ Easy installation and additional capacity expansion
- ✓ R410A refrigerant
- ✓ Fluent cooling capacity control

CoolSeven

7U tall In-Rack Cooling Unit is integrated into 19" racks and utilizes a split cooling system composed of two components – an indoor and an outdoor unit.

↳ Main advantages

- ✓ Unit is a direct expansion type which provides precision cooling inside racks
- ✓ Compatible with all 19" IT racks
- ✓ Individual cooling control on rack level
- ✓ EC fans with very low power consumption
- ✓ Heat dissipation directly from the racks to outside areas
- ✓ Capable of communicating with a monitoring system (e.g. CONTEG Pro Server)
- ✓ Precise and fluent cooling capacity control corresponding to air temperature
- ✓ A variant of the outdoor unit for very low temperatures is available
- ✓ Can operate without filters
- ✓ A wide selection of accessories
- ✓ Emergency door opening function when the emergency temperature is exceeded. Compatible with the EOS – Emergency opening system.

↳ Suitable for

- ✓ Office spaces
- ✓ IT racks or Mini Data Centers
- ✓ Racks with insufficient or no air conditioning
- ✓ Dusty environments



CoolTeg XC

CoolTeg XC In-Row Cooling 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

- ✓ Operating temperature range -40 to 55 °C
- ✓ Very high energy-efficiency and smooth power regulation
- ✓ No water piping is required in the data center
- ✓ The compressor is safely located inside the data center
- ✓ Low level of outdoor unit's noise
- ✓ R410A refrigerant



CoolTeg DF

CoolTeg DF In-Row Cooling Unit is based on an innovative principle of dual-fluid cooling that combines water-based and direct expansion cooling.

↳ Main advantages

- ✓ Integrated free cooling
- ✓ Width of only 40 cm and a maximum cooling capacity of up to 24.5 kW
- ✓ The most efficient dual-fluid heat exchanger in its category
- ✓ Low operating costs
- ✓ Redundancy within one system

CoolTop

CoolTop Above-Rack Cooling Units are specially designed for easy installation on the top of IT racks, and are perfectly suitable for effective targeted cooling of server rooms and large data centers.

↳ Main advantages

- ✓ Does not occupy floor area
- ✓ Brings chilled air directly to cold aisle in front of server racks
- ✓ Vertical air loop, with local flexibility
- ✓ Extremely low power consumption due to large heat exchanger and EC axial fans
- ✓ Modern and user-friendly control system
- ✓ Allows flexibility of room arrangement
- ✓ Raised floor unnecessary for air distribution
- ✓ Installs easily in contained hot or cold aisle
- ✓ Perfectly compatible with CONTEG IT racks and wide range of accessories
- ✓ Controller with ModBus communication (contained in the controller)
- ✓ Wide range of accessories

↳ Suitable for

- ✓ Contained Hot Aisles and Contained Cold Aisles
- ✓ Can be combined with CoolTeg cooling units



CoolTop CW

CoolTop CW Above-Rack Cooling Unit is specially designed for easy installation above IT racks, and is uniquely suitable for effective targeted cooling of server rooms and large data centers.

↳ Main advantages

- ✓ Regulation between 0 – 100 % cooling capacity
- ✓ Virtually unlimited number of indoor units per hydraulic circuit
- ✓ 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
- ✓ Operation water temperature between 6 °C and 30 °C

CoolTop DX

Indoor CoolTop DX Above-Rack Cooling Unit is connected with outdoor condensing unit/units via refrigerant piping. CoolTop DX includes special heat exchanger with two separate refrigerant circuits.

↳ Main advantages

- ✓ No water in data center
- ✓ Dual-circuit heat exchanger
- ✓ Regulation between 30 – 100 % cooling capacity
- ✓ If the CoolTop DX unit is connected to the CoolOut unit – the cooling capacity control is then starting from 11 %
- ✓ Ready to be connected to 2 outdoor units



CoolOut

The CoolOut Outdoor Condensing Unit is specially designed for conducting heat out of data centers. The unit meets all the strict demands on precision, stability and service life required for data centers.

↳ Main advantages

- ✓ Communication and cooling regulation based on commands from the DC
- ✓ Very low consumption thanks to high-quality EC fans and active regulation of condensing pressure
- ✓ Inverter-controlled BLDC compressor
- ✓ Wide range of cooling power from 11 % upwards
- ✓ Versions for extreme ambient temperatures available
- ✓ Ability to communicate with a monitoring system, to monitor and control operating parameters through the indoor unit
- ✓ Simple to install and operate
- ✓ Option for remote servicing after connecting a PGDx service display
- ✓ Linear electronic expansion valve
- ✓ Robust frame and housing made of high-quality corrosion-resistant materials



CoolRAC

A range of indoor Room-Cooling Units with capacities from 40 to 100 kW and three different cooling technologies. Variable fan module installation allows for air outlets above the floor, in a raised floor, or on ductwork. CoolRAC units can be equipped with numerous additional accessories and fitted with one or two powerful radial EC fans for increased redundancy.

CoolRAC CW

Designed to be connected to any type of chilled water.

- ✓ Variable chiller types fulfill any requirements
- ✓ Free-cooling system saves significant amount of power
- ✓ Virtually unlimited number of indoor units per hydraulic circuit



CoolRAC XC

Based on the principle of compressor cooling and direct evaporation. The compressor is integrated into the indoor unit, which is connected to its external condenser unit.

- ✓ Operation in temperatures from -40 °C up to +55 °C
- ✓ Regulation between 17-100 % cooling capacity

CoolRAC DF

Based on an innovative principle of dual-fluid cooling that combines water-based and direct expansion cooling.

- ✓ Indirect free-cooling integrated in the indoor room cooling unit, which can be connected to one or more outdoor dry coolers
- ✓ The indoor room cooling unit automatically switches between compressor, mixed and water mode according to the temperatures outside and inside the data center, to minimize the energy consumption of the system



www.conteg.com

CONTEG, spol. s r.o.
Stetkova 1638/18, 140 00 Prague 4, Czech Republic
Tel.: +420 565 300 358
info@conteg.com