CONTEG

COMPLETE SOLUTIONS FOR DATA CENTERS

↳ We will provide everything you need

WE ARE CONTEG

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

Since its founding in 1998, CONTEG has continued its constant development and growth. Today, we are one of the leading manufacturers of complete solutions for data centers, telecommunication cabinets, and industrial enclosures. We provide a global sales and technical support, have manufacturing plants equipped with latest technologies, and also operate a data center testing laboratory. We supply our solutions to small businesses, large corporations as well as industrial customers.
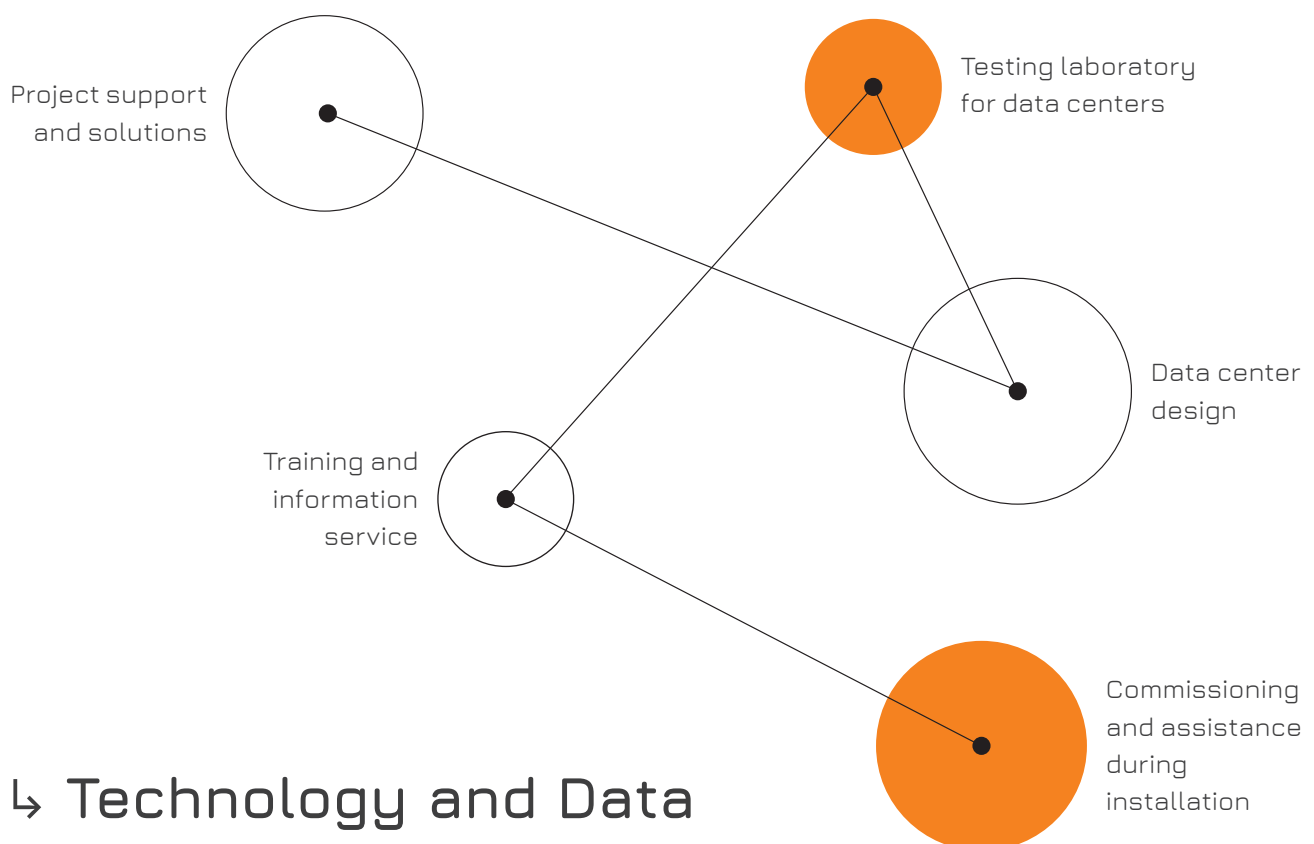
DATA CENTERS

Building a data center is a very complex process, requiring knowledge of other disciplines, such as cooling and power systems, security, monitoring, and supervision.

Correct layout of a data center ensures the customer's satisfaction in terms of safety issues, energy consumption, uptime, and countless other areas. Our team of experts has extensive experience with planning data centers based on best practices and BICSI standards.

We offer services in consulting for projects of all sizes, from small server rooms to large scale data centers.

PROFESSIONAL SERVICES

Project support
and solutions

Testing laboratory
for data centers

Data center
design

Training and
information
service

Commissioning
and assistance
during
installation

↳ Technology and Data Center supplier that always makes it easy to find a solution

Cooling Units for IT

◣ ABOVE-RACK COOLING UNITS

The unique CoolTop cooling units are specially designed for installing above IT racks. The system takes up no floor space, freeing it up for installation of additional racks. Therefore, it contributes significantly to increasing the profitability of the data center.

CoolTop units are available in both Chilled Water (CW) and Direct Expansion (DX) variants. With their length of 2 400 mm, they fit perfectly above three racks 800 mm wide, or four racks 600 mm wide.

↳ Suitable for

- ✓ Contained hot aisles
- ✓ Contained cold aisles
- ✓ Open aisles

↳ Benefits

- ✓ Very high cooling capacity
- ✓ Does not require a raised floor
- ✓ Can be installed on racks or suspended from the ceiling
- ✓ Can be combined with CoolTeg cooling units
- ✓ Does not take up any floor space
- ✓ Extremely low power consumption
- ✓ Immediate increase in cooling output

◣ IN-ROW COOLING UNITS

CoolTeg units represent a family of precision cooling units designed for in-row of racks installation. These cooling units of different sizes and cooling capacities are available in Chilled Water (CW), Direct Expansion (DX), XC (DX with integrated compressor) and DF (Dual Fluid) variants.

The arrangement of racks and cooling units in a contained aisle ensures the servers draw in only the cold air from the contained space. No risk of mixing with warm air and potential formation of local hot spots. The cooling units draw in hot air only and thus make maximum use of their cooling potential.

↳ Suitable for

- ✓ Contained hot aisles
- ✓ Contained cold aisles
- ✓ Open aisles
- ✓ Mini data centers

↳ Benefits

- ✓ High cooling capacity
- ✓ Does not require a raised floor
- ✓ Ease of expandability of the data center
- ✓ Supply cold air directly to the front of the servers
- ✓ Very low power consumption thanks to EC fans

MINI DATA CENTER

is a compact arrangement completely insulated from the surrounding environment; combines CoolTeg cooling units and racks from the PREMIUM Server series. The front and rear doors of the racks are glass or full-metal and form a contained space for air circulation between the servers and the cooling unit. Thus, zones with different temperatures and heat loads can be installed in the same containment or data center allowing for a greater flexibility within one facility.

The system is universal and fully compatible with CoolTeg CW (chilled water), CoolTeg DX (direct expansion), CoolTeg XC (direct expansion with integrated compressor), and CoolTeg DF (dual fluid) units. Any number of units and racks can be configured just as the customer requires.

The system can be equipped with a number of safety features such as independent monitoring system RAMOS — including sensors, emergency opening system (EOS), fire extinguishing system LES-RACK, and more.

The Mini Data Center system is suitable for both small server rooms and large data centers that require zones with different operating parameters.

CONTAINED AISLE

physically separates hot and cold zones, thus efficiently reducing operating costs and power requirements of the data center. Also prevents air mixing and eliminates hot spots.
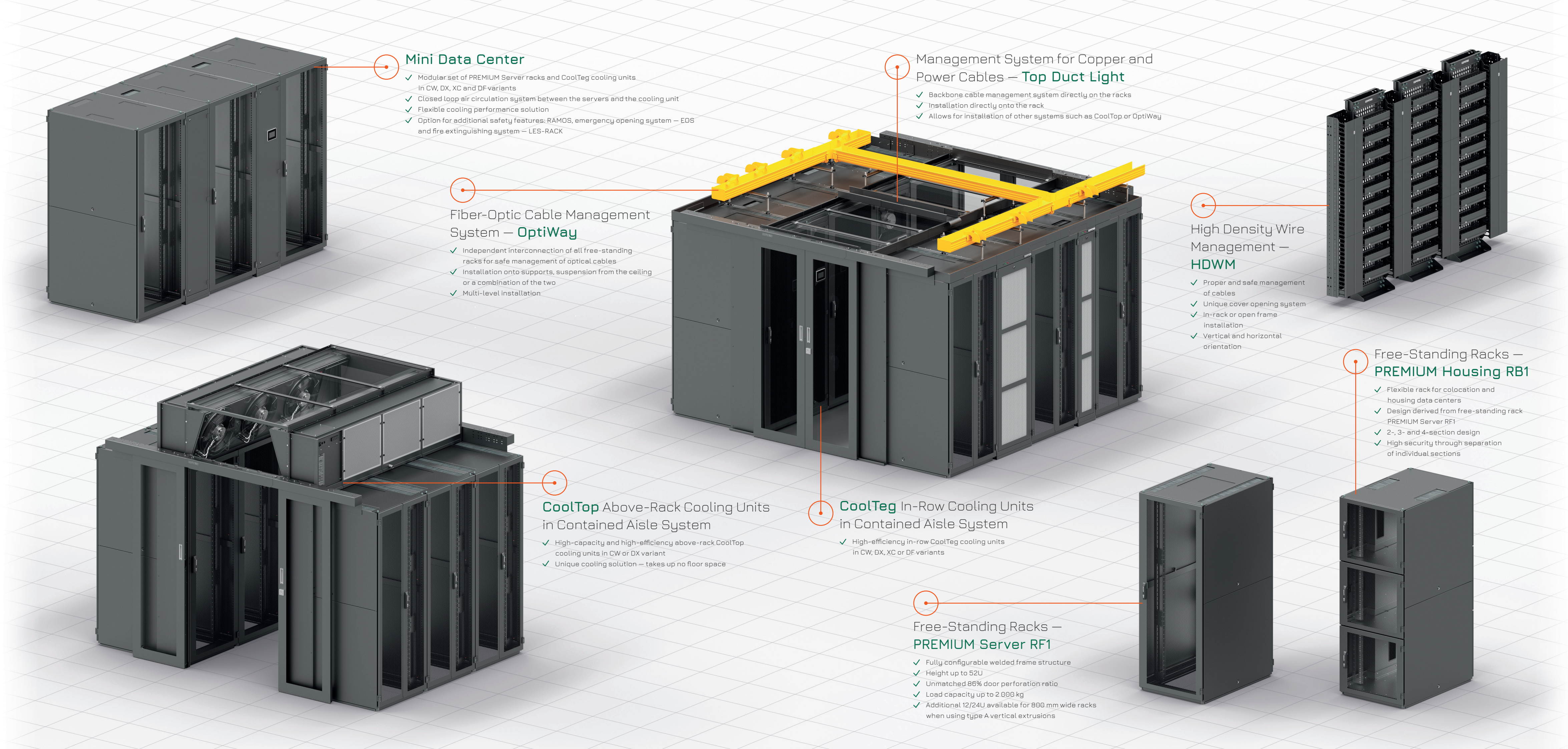
Cool air is distributed to the cold zone by CoolTeg In-Row Cooling Units or CoolTop Above-Rack Cooling Units. Based on the arrangement, we differentiate between contained hot aisles (CHA) and contained cold aisles (CCA).

Contained aisle enables controlling the air flow based on pressure differences. It thus ensures supply of treated air exactly in the amount the servers require, which has a positive effect on the operating costs and lifetime of the servers.

Aisles 900 to 1 800 mm wide are arranged either as two rows of free-standing racks or as a single row of racks facing a wall. In addition, they are fitted with roof panels and sliding doors which prevent any undesirable air circulation so that IT and cooling systems can operate with maximum efficiency, enabling the use of 100 % of the produced cold air.

The system can be complemented by a wide range of safety features such as independent monitoring system RAMOS, system of drop-down or openable ceilings, hypoxic fire prevention system, and other safety measures.

The contained aisle system with option for flexible expansion is suitable for any type of data center.

Mini Data Center
- ✓ Modular set of PREMIUM Server racks and CoolTeg cooling units in CW, DX, XC and DF variants
- ✓ Closed loop air circulation system between the servers and the cooling unit
- ✓ Flexible cooling performance solution
- ✓ Option for additional safety features: RAMOS, emergency opening system — EOS and fire extinguishing system — LES-RACK

Management System for Copper and Power Cables — Top Duct Light
- ✓ Backbone cable management system directly on the racks
- ✓ Installation directly onto the rack
- ✓ Allows for installation of other systems such as CoolTop or OptiWay

Fiber-Optic Cable Management System — OptiWay
- ✓ Independent interconnection of all free-standing racks for safe management of optical cables
- ✓ Installation onto supports, suspension from the ceiling or a combination of the two
- ✓ Multi-level installation

High Density Wire Management — HDWM
- ✓ Proper and safe management of cables
- ✓ Unique cover opening system
- ✓ In-rack or open frame installation
- ✓ Vertical and horizontal orientation

CoolTop Above-Rack Cooling Units in Contained Aisle System
- ✓ High-capacity and high-efficiency above-rack CoolTop cooling units in CW or DX variant
- ✓ Unique cooling solution — takes up no floor space

CoolTeg In-Row Cooling Units in Contained Aisle System
- ✓ High-efficiency in-row CoolTeg cooling units in CW, DX, XC or DF variants

Free-Standing Racks — PREMIUM Housing RB1
- ✓ Flexible rack for colocation and housing data centers
- ✓ Design derived from free-standing rack PREMIUM Server RF1
- ✓ 2-, 3- and 4-section design
- ✓ High security through separation of individual sections

Free-Standing Racks — PREMIUM Server RF1
- ✓ Fully configurable welded frame structure
- ✓ Height up to 52U
- ✓ Unmatched 86% door perforation ratio
- ✓ Load capacity up to 2 000 kg
- ✓ Additional 12/24U available for 800 mm wide racks when using type A vertical extrusions

↳ INTELLIGENT AND BASIC POWER DISTRIBUTION UNITS — PDU
- ✓ Basic, monitoring or managed rack PDUs
- ✓ Wide range of types and numbers of sockets
- ✓ High parameter measurement accuracy
- ✓ Tool-free installation
- ✓ Hybrid access options — Ethernet, Modbus TCP

↳ MONITORING AND SAFETY — RAMOS
- ✓ Expandable monitoring system with wide range of sensors and extensive notification options
- ✓ Simple integration of multiple systems into a unified monitoring environment — CONTEG Pro Server
- ✓ Option for central access control at rack- and aisle-level

↳ ANTI-FIRE SYSTEMS
- ✓ Autonomous LES-RACK solution for Mini Data Center systems. The solution operates by filling the protected space with FK 5-1-12 fire-extinguishing medium to put fires out.
- ✓ Hypoxic air system. Ensures 100% prevention of fires. Reduces the oxygen concentration in the air to a level that fire does not even start.

↳ INDOOR ROOM-COOLING UNITS — COOLRAC
- ✓ 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

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