



Press release

First joint product: Watercooled Micro Data Center with 40 kW combined cooling capacity and innovative waste heat recovery.

STULZ and Cloud&Heat plan global partnership

Hamburg / Dresden – October 1, 2018. **The innovative waste heat concept from Cloud&Heat is now available as an equipment option for the STULZ micro data center solution. In return, STULZ will extend its service and sales operation to the German company and assist with its international expansion.**

STULZ, a global leading specialist in precision air conditioning, has announced a new strategic partnership with Cloud&Heat Technologies, a specialist in energy-efficient, scalable and reliable data centers. As part of this new technical and sales alliance, the hot water direct cooling system developed by Dresden-based Cloud&Heat is to be marketed in future as an equipment option for the STULZ MicroDC series.

In addition to IT cooling, efficient heat recovery is at the heart of Cloud&Heat's solution. Its patented technology enables the company to bring the heat produced by the IT equipment to a constant temperature of 60°C degrees and exports it for heating buildings and water. This technique not only lowers the cost of cooling the data center, but also of heating and hot water. This concept therefore helps to massively reduce the CO2 footprint of IT systems.

With the Watercooled Micro Data Center, the two companies have designed an air-conditioned 19" rack for high-density servers with IT loads of up to 40 kW per rack. The modern cooling concept combines the advantages of a hot water direct cooling system with the recirculation capacity of a side cooler - energy savings of around 60 percent can be achieved compared to classic circulating air cooling systems. The water cooling system is available in various versions for blade servers or GPU computing.

The combination of cloud-based computing power and decentralized heat generation offers STULZ customers a proven solution satisfying a broad range of applications. Cloud&Heat systems have already been successfully deployed worldwide in the areas of high-performance computing and on-premise cloud. The company also supports data center operators and project developers in the drive for green building initiatives and prosumer solutions in particular in edge computing architectures, IoT and digitization projects.

As well as the technology for recovering server waste heat, Cloud&Heat will also be providing STULZ with the software for the pump control, temperature regulation and remote monitoring. In exchange, STULZ will support the cloud specialist by providing service and maintenance and assisting with the international expansion of its sales activities. STULZ currently has 20 subsidiaries in globally important target markets such as the U.S., China and Brazil, and its extensive partner network has a presence in over 140 countries worldwide. The Watercooled Micro Data Center is available globally and can be purchased from STULZ and Cloud&Heat.

At the GITEX in Dubai from 14th to 18th October 2018 the Watercooled Micro Data Center will be presented for the first time.

About Stulz

Since its foundation in 1947, the STULZ company has evolved into one of the world's leading suppliers of air conditioning technology. With the manufacture of precision air conditioning units and chillers, the sale of air conditioning and humidifying systems, and service and facility management, this division of the STULZ Group achieved sales of around 450 million euros in 2017. Since 1974 the Group has seen continual international expansion of its air conditioning business, specializing in air conditioning for data centers and telecommunications installations. STULZ employs 2,400 workers at ten production sites (two in Germany and in China, one in Italy, the U.S., the UK, Spain, Brazil and India) and 20 sales companies (in Germany, France, Italy, the UK, the Netherlands, Mexico, Austria, Belgium, New Zealand, Poland, Brazil, Spain, China, India, Indonesia, Singapore, South Africa, Sweden, Australia, and the U.S.). The company also cooperates with sales and service partners in over 140 other countries, and therefore boasts an international network of air conditioning specialists. The STULZ Group employs around 7,200 people worldwide. Current annual sales are around 1,300 million euros.

More information at www.stulz.com

About Cloud&Heat Technologies

Since its foundation in 2011, Cloud&Heat Technologies has been on a mission to make sustainability the driver of digital innovation. The Dresden-based company develops, builds and operates energy-efficient, green, reliable and scalable data centers that answer to the demands of the cloud future. It offers private and public OpenStack-based cloud solutions in two different areas: Firstly, customized IT infrastructure solutions, such as data centers in a box (DiaB) and data center containers (DC) for small and medium-sized companies; secondly, large IT infrastructures with a holistic combination of cloud and heat solutions. In both these fields, Cloud&Heat uses the latest generation of the hot water direct cooling system it developed and patented itself. This system enables the waste heat from data centers to be maintained at a constant temperature of 60 degrees and used for heating buildings or for connection to long and short-range district heating networks. In this way, Cloud&Heat builds and sells the most energy and cost-efficient data centers in the world. The company has already received numerous awards for this technology, and its client base now includes companies such as Innogy and CommerzReal from Germany, plus firms from Japan, Norway, and the U.S. Cloud&Heat is committed to numerous research and development projects, including AUDITOR and SecuStack.

More information at www.cloudandheat.com