MISSION CRITICAL COOLING





Precision Cooling Mission Critical Air Handling Units

Global Expertise for Precision Cooling Solutions

STULZ is a privately owned, global manufacturer of highly efficient temperature and humidity management technology. STULZ engineers a full line of air conditioners, air handling units, ultrasonic humidifiers, desiccant dehumidifiers and custom solutions, specifically for industrial, commercial and secure mission-critical applications.

The global STULZ Group includes two major divisions, seven production plants, and hundreds of sales and service partners around the world. Wherever you are, we have a presence and an innovative solution designed to meet your specific needs.





Custom Outdoor AHU STULZ CyberHandler

STULZ CyberHandler is specifically designed to free up space in the data center, allowing more room for IT equipment. Utilizing proven precision technology from STULZ, CyberHandler satisfies the exacting requirements of outdoor, rooftop or at grade mounted mission critical applications.





| | | STULZ CyberHandler (ASM) | | | | |
|----------|----------|--------------------------|--|--|--|--|
| | | DX or CW | | | | |
| Consitu | kW (MBH) | 120 - 460 (420 - 1,560) | | | | |
| Capacity | Tons | 35 - 130 | | | | |
| Airflow | m3/hr | 20,400 - 93,500 | | | | |
| | CFM | 12,000 - 55,000 | | | | |

STULZ CyberHandler combines decades of experience building rugged outdoor air handling equipment and data center cooling design expertise to create a unit ideally suited for harsh outdoor conditions, while providing mission critical design elements.

- STULZ state-of-the-art E^2 Microprocessor with a range of BMS interface options
- EC fan array with variable airflow
- Direct free cooling options including direct adiabatic
- Environmentally friendly R410A refrigerant
- Modular design
- Variety of installation configurations, including roof and at-grade
- No maintenance work inside the data center (safety, cleanliness, time-saving and security)
- Large capacity range
- Coil bypass design reduces air pressure drop under low load conditions
- Powder coated aluminum panels with a variety of insulation options
- Various voltages available in 50/60 Hz designs
- Dual power supply available with Automatic Transfer Switch
 - Filter options available in MERV7 to MERV14
- Ease of access for service and maintenance
- Meets global standards

Indirect Evaporative AHU STULZ IeCE - Indirect Evaporative

STULZ IECE is a purpose built AHU designed to meet the demands of modern IT loads while maximizing the use of highly efficient free cooling and indirect evaporative technologies. STULZ IECE can operate in any combination of dry, wet, or mechanical trim cooling modes based on external environmental conditions.





STULZ IeCE

Indirect Evaporative Cooling Equipment

Purpose built solutions ranging up to $60,000 \text{ cfm} (102,000 \text{ m}^3/\text{hr}) \text{ per unit.}$

Using an air-to-air heat exchanger, STULZ IeCE keeps the conditioned space free from outside contaminants while achieving potential savings of up to 75% over traditional mechanical cooling methods.

- STULZ state-of-the-art E^2 Microprocessor with a range of BMS interface options
- EC fan array with variable airflow
- DX & CW trim cooling or 100% back-up cooling options
 Environmentally friendly R410A refrigerant
- Variety of installation configurations including roof and at-grade
- Three modes of operation: Dry Mode, Wet Mode, DX & CW Assist Mode
- Provides tremendous energy savings vs standard Direct Expansion (DX) or Chilled Water (CW) only
- Lower OPEX
- Various voltages available in 50/60 Hz designs
- Dual power supply available with Automatic Transfer Switch
- Filter options available in MERV7 to MERV14
- Ease of access for service and maintenance
- Meets global standards

Packaged Rooftop STULZ CyberPack

STULZ CyberPack provides a self-contained, DX air-cooled rooftop system, designed specifically for continuous operation in mission critical environments.





| | | STULZ CyberPack | | | |
|----------|--------------------|----------------------|--|--|--|
| Consoitu | kW (MBH) | 40 - 105 (140 - 360) | | | |
| Capacity | Tons | 12 - 30 | | | |
| Ainflow | m ³ /hr | 9,000 - 20,400 | | | |
| Airflow | CFM | 5,300 - 12,000 | | | |

Capacity data based on 80.0°F (26.7°C) db / 67.0°F (19.4°C) wb – For Reference Only – Built designs are driven by customer specification.

- STULZ state-of-the-art $E^2\,{\rm Microprocessor}$ with a range of BMS interface options
- 100% Air-Side Economizer option to achieve lower OPEX
- Robust all aluminum cabinet construction for long term operation
- Highly efficient scroll compressor technology with multi-circuit
 and staged configurations
- Environmentally friendly R410A refrigerant
- -30°F to 115°F (-34°C to 46°C) ambient operation
- EC fans offer considerable energy cost savings and maintenance free operation
- Condenser fan speed control via system controller without the use of VFD's
- Functional operations: cooling, dehumidification and filtration
- Various voltages available in 50/60 Hz designs
- Filter options available in MERV7 to MERV14
- Meets global standards

STULZ CyberPack was designed specifically for data centers, with solid construction, proven cooling technology and flexible controls.

Custom Indoor AHU STULZ Custom AHU

The STULZ Custom AHU is a purpose built solution that meets users unique requirements for indoor mounted environments. STULZ works closely with our customers to design the optimal unit for their specific needs, ensuring the right solution, everytime.





STULZ Custom AHU

Purpose built solution based on user requirements.

Custom air handling units are engineered to order solutions that meet today's cutting edge data center design requirements. By using proven STULZ technology, custom AHU's provide the efficiency and performance that users and operators demand.

- STULZ' state-of-the-art $E^2\,{\rm Microprocessor}$ with a range of BMS interface options
- 3rd party controls integration available
- Controller UPS available for keep-alive
- Robust, extruded aluminum construction with various panel thickness, including a thermal break option
- EC fan array with variable airflow
- Extensive range of capacities and cooling configurations
 - Direct Expansion
 - Chilled Water
 - Direct Adiabatic
 - Free Cooling: air-side and water-side economizer solutions
- Various voltages available in 50/60 Hz designs
- Dual power supply available with Automatic Transfer Switch
- Custom horizontal and vertical orientation to fit any space
- Flexibility to be mounted on pad, steel, curb, or floor stand structures with lifting points for rigging
- Filter options available in MERV7 to MERV14
- Ease of access for service and maintenance
- Meets global standards

Horizontal AHU

The horizontal AHU, available with direct expansion (DX) and chilled water (CW) cooling, is designed specifically to meet customer requirements. A specialized fan wall array ensures uniform airflow while meeting low power consumption requirements. Counterbalanced fan inlet backdraft dampers minimize air recirculation.

Modular Split AHU

The modular split AHU is available with DX and CW cooling. A vertical center split allows the modular AHU to fit in service elevators and maneuver within tight spaces. Its modular design allows easy reassembly and rewireing on-site using minimal labor (via frame and electrical connectors). The unit can also be deployed and/or operated as a half unit by only utilizing one side, therefore increasing redundancy.

Horizontal Stackable Fan/Coil Unit

Stackable chilled water fan coil unit reduces total footprint while maintaining unit serviceability. Designed to easily stack units securely. Electrical connectors provided between stacked units to reduce on-site installation time and cost.

Horizontal Split Sectional AHU

The horizontal split sectional AHU is available with DX and CW cooling. It is sized and split to fit in a standard freight shipping container for intermodal transportation. Unit can be easily reassembled and rewired on site using minimal labor (via frame and electrical connectors). Air discharge sound attenuators provided for low sound applications.









Solutions Portfolio

Precision Cooling and Ultrasonic Humidification

| | | Indoor Cooling | | | Outdoor Cooling | | | | Retrofit and Humidification | | | |
|-------------|--------------------------|---------------------------------------|-----------------------|---|-----------------|-----------------------|--|---------------------|-----------------------------|--------------------|------------------------|------------------------------|
| | | Perimeter | Custom Air Handler | Row | Ceiling | Custom Air Handler | Indirect Evaporative Air Handler | Packaged Rooftop | Modular | EC Fan Retrofit | Drop-in Replacement | Ultrasonic Humidification |
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| Dire | ect Expansion (DX) | • | • | • | • | • | • | • | • | • | | |
| С | hilled Water (CW) | • | • | • | • | • | • | • | • | • | • | • |
| nizers | Air-Side Economizer | • | • | | | • | • | • | • | | | • |
| Economizers | Water-Side Economizer | • | • | • | • | • | • | • | • | | | |
| | | Controls and Monitoring | | | | | | | | | | |
| | | Service and Parts | | | | | | | | | | |

For further information, please visit our website at www.stulz-usa.com

Designed & Manufactured at STULZ USA

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