

## CONNECT AND PROTECT

## TRUSTED DATA CENTER AND **NETWORKING SOLUTIONS FOR A CONNECTED WORLD**



## **Connected World**

EVERY THING IS BECOMING CONNECTED AND GETTING FASTER!

# FROM THE EDGE TO THE CLOUD

Trust in nVent's optimized solutions for connecting and protecting mission critical data center and networking infrastructure.

The speed of changing technology creates significant new challenges for connecting and protecting data center and network infrastructure. Achievements of increased processing capacity, higher data latency and reduced operational costs are met with both expected and unexpected consequences. Multi-vendor systems create complexity. Busy connection pathways are stressed to their limits and new security threats emerge daily.

Ever-expanding IT and communication requirements demand remote equipment solutions in places where they never existed.

The highest amount of data and network availability is crucial in today's connected world. Our broad portfolio provides design flexibility and protection.



**Ensure uptime of your infrastructure** 



Reduce planning and installation time

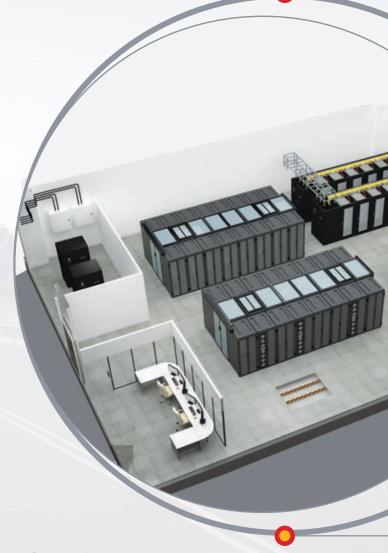


Minimize the operational costs



Maximize resources with service and support









# Global Presence and Regional Support

ESTABLISHED AS ONE OF THE BEST

## SAFETY

nVent manufacturing processes are conducted in accordance with ISO 9001 ensuring maximum operating efficiency for our manufacturing & assembly facilities.



QUALITY

nVent solutions are designed according to regional and national safety standards.





SUPPORT

nVent experts to support you on-site all around the globe.



INNOVATION

nVent connects and protects mission critical infrastructure and personnel by delivering tailored solutions based on our customer's challenges.

OUR MODULAR AND BROAD PORTFOLIO COMBINED WITH DESIGN AND PROJECT SUPPORT ENABLES YOU TO SPECIFY AND DEPLOY YOUR PROJECT ON TIME TO ENSURE DATA AND NETWORK INFRASTRUCTURE AVAILABILITY AND PROTECTION.

CUSTOMERS
ALWAYS
COME
FIRST



nVent CADDY includes fixing, fastening, and support products for high performance cabling systems designed to save installation time.

**CADDY** 

#### **RAYCHEM**

nVent RAYCHEM TraceTek leak detection solutions pinpoint the source of water and fuel leaks, providing you with critical information to take swift action and avoid damage.

nVent ERICO offers a full range of facility electrical protection products to protect data centers, network and other facilities.

**ERICO** 



nVent HOFFMAN offers a broad range of targeted networking enclosures and racks for protecting sensitive electronic equipment.

**HOFFMAN** 

#### **SCHROFF**

nVent SCHROFF brand offers modular and scalable server cabinets, aisle containment systems and active cooling solutions to perfectly fit customers' data center requirements.

QINGDAO

**MINNEAPOLIS** WARWICK

**REYNOSA** 

SAN DIEGO

**DZIERZONIOW** BETSCHDORF @ STRAUBENHARDT

**BOITUVA** 

Manufacturing, service, sales and distribution centres

enclosures in use globally

BANGALORE

Workforce



Manufacturing Sites

# **Data Centers** PROTECTION FOR SMALL TO HYPERSCALE DATA CENTERS



#### **SMART SERVER CABINETS**

- · Welded steel frame with static load 1,600 kg / 3,525 lbs.
- · Modular customizable platforms
- 42RU, 47RU & 52RU standard heights, custom available
- 1000/1200 mm standard depths, custom available
- · Colocation, seismic and NEMA rated cabinets available

#### **SMART CABLE MANAGEMENT**

· Flexible accessories for different cabling zones



#### **SMART MONITORING**

- · Data center environmental monitoring platform
- · Compact design fits anywhere in a data center rack
- Web browser GUI for setup and maintenance
- · Three management ports to connect external sensors and Modbus devices
- · Up to 16 sensors/Modbus devices per management port with a cable length of 40m
- LCD touch display
- · Supports industry standard network protocols (HTTPS, SNMP, SMTP, BACnet, Modbus/TCP)







- · Leak detection sensors: water, fuel, caustic chemicals, and hydrocarbons
- · Robust and reliable conductive sensing cables
- · Interchangeable components allows modular configurations
- · Advanced control and alarm panels







#### **BASIC PDUs**

- · Provide convenient, reliable power to equipment
- · Rack- and panel-mount models available

#### I-PDUs

- · Metered and switched solutions in single and three phase versions
- · Hot-pluggable meter and field replaceable PSU
- Metering accuracy within +/-1%







#### **SMART** AISLE CONTAINMENT

- · Modular components to optimize data center air flow
- · Designed to support different fire suppression systems
- · 3 different door options: swing door, manual and automatic sliding doors
- · Design allows easy integration of third party cabinets





#### **SMART** PRECISION AND HIGH DENSITY LIQUID COOLING

#### **RACKCHILLER IN ROW**

- · Modular and scalable precision cooling solution
- · Available in 2 different performance classes -Cooling performance of 55kW (300 mm) and 75kW (600 mm) in optimal operating conditions
- · Built-in redundancy through EC fan technology

#### **CLOSED LOOP MICRO DATA CENTER**

- · Integrated rack-based cooling solution
- · Modular and scalable to rack level cooling requirements
- · EMC-shielded, harsh environment as well as outdoor solutions available
- · Reduced noise levels

#### **RACKCHILLER REAR DOOR**

- · No noise, minimal power consumption, low maintenance
- · Active solution integrated fans supplement air flow and minimize pressure drop to ensure even distribution across the heat exchanger
- · Frame separation solution allows separation of coil and condensate management from the rack-mount equipment Available in 6 standard dimensions

#### **DIRECT-TO-CHIP COOLING**

- · Enables maximum heat dissipation in high-density racks
- · Facilitate peak performance for higher powered processors
- May reduce dependence on fans and expensive air handling systems
- Reduce OPEX- utilizes warm water cooling and eliminates chilled water requirements



Optimized for up to 25kW per Rack



Optimized for up to 25kW per Rack



Optimized for up to 55kW per Rack





Optimized for extreme high densities 40kW - 500kW+





#### **SMART NETWORKING RACKS AND CABINETS**

#### **WALL-MOUNT CABINETS**

- · Double-hinged or single-door cabinets
- · Front and rear access to 19-in. rack-mounted equipment
- · Protection against water, dirt, corrosive agents and other contaminants
- · Broad range of sizes, materials and configurations
- · Easy, one person installation
- · Some models available with optional AC unit
- Models in NEMA Type 1, 3R, 4, 4X, 12

#### 2- AND 4-POST OPEN FRAME RACKS

- · Strong aluminum construction with RU markings on front and rear
- · 4-post has adjustable depth for maximum versatility
- · 2- and 4-post racks can be ganged
- · 2500-lb. load capacity (4-post)
- · Seismic versions







#### **FREE STANDING CABINETS**

- · Broad range of preengineered configurations for networking equipment, switches and servers
- · Horizontal and vertical cable management
- · 4 different widths, 4 different depths and fully compatible accessories





#### **VERTICAL AND HORIZONTAL MANAGERS**

- · Single- or double-sided models available
- Mounts on sides of or between 2- and 4-post open frame racks
- · High capacity patch cord support and management
- · Supports Cat 5e, 6, 6A and fiber optic cables







#### **CAT HP J-HOOK SYSTEM**

- · Advanced, non-continuous pathway support solution
- One-person installation
- No grounding and bonding
- · Multiple color options
- · Fire rated

#### **ROD LOCK**

- Fast, easy and secure installations
- "Push-to-install" design
- Prefabricated (multi-level trapeze) assemblies
- Telescoping strut eliminates the need for cutting and preparing sections

#### **SPEED LINK**

- Universal overhead support system for time saving installation
- · Complete systems for easy fastening to different building structures
- Unique push/pull keyless release enables easy adjustments
- · Fire rated









#### **SMART CABLE SUPPORT AND PATHWAYS**

- · Ceiling mounted and under floor configurations
- · Easy access for maintenance
- Flexible line of components and accessories







#### **SMART GROUNDING AND BONDING**

#### **GROUNDING AND BONDING**

Full range of facility electrical protection products to protect data centers, network and other facilities











# Work with Experts TO DEPLOY YOUR SPECIFIED SOLUTION

### **SMART FACTORY / INDUSTRY 4.0**

Today's "Connected Enterprise" networks need to support expanding voice, data and video applications on the factory floor and harsh environments. Industrial Networks & IoT deployments also require protection for edge-computing applications, such as industrial automation, intelligent lighting, security and safety systems.

nVent offers a broad range of industrial networking rack and enclosure solutions for protecting IT Equipment (ITE) on the factory floor. Options include integrated AC units and NEMA Type 1, 3R, 4, 4X, and 12 rated protection.



### SMART COOLING SOLUTIONS

Maintaining high availability (uptime) at minimal operational costs remains a major challenge in today's data centers and networks. A significant portion of data center budgets includes energy consumption for IT Equipment and server cooling. In addition to traditional High-Performance Computing (HPC), Al-related compute-intensive applications have also increased the development of new designs for efficient cooling for data centers and edge computing. nVent offers a comprehensive range of standard and customized air, indirect and direct water cooling solutions.









### **PROFESSIONAL SERVICES**

With a network of qualified field installation and repair technicians around the world, nVent offers unparalleled cooling service to quickly restore your system. Depend on us for local customer service, regional spare parts inventories and competitive standard warranties. Extended warranties and preventive maintenance are also available.

#### **Europe**

 Straubenhardt, Germany
 Tel: +49 7082 794 0

 Betschdorf, France
 Tel: +33 3 88 90 64 90

 Warsaw, Poland
 Tel: +48 22 209 98 35

 Assago, Italy
 Tel: +39 02 577 6151 224

#### **North America**

**All locations** Tel: +1 763-422-2661

#### Middle East & India

 Dubai, United Arab Emirates
 Tel: +971 50 55 19823

 Bangalore, India
 Tel: +91 80 6715 8900

 Istanbul, Turkey
 Tel: +90 545 284 09 08

#### Asia

 Shanghai, China
 Tel: +86 21 2412 6943

 Qingdao, China
 Tel: +86 523 8771 6101

 Singapore
 Tel: +65 6768 5800

 Shin-Yokohama, Japan
 Tel: +81 45 476 0271

Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER



nVent.com/dns