CONNECT AND PROTECT

Leading-Edge Electronics Protection

nVent

SCHROFF

Who we are

ABOUT NVENT

At nVent, we believe that safer systems ensure a more secure world. We connect and protect our customers with inventive electrical solutions. nVent is a $2 billion company with nearly 9,000 employees worldwide. We operate three business segments, each boasting brands that are among the most established in the electrical industry.

ELECTRICAL AND FASTENING SOLUTIONS

CADDY ERICO

ENCLOSURES

HOFFMAN SCHROFF

THERMAL MANAGEMENT

RAYCHEM TRACER

ABOUT ENCLOSURES

Electrical systems come in all shapes and sizes, from massive industrial controls to single components. nVent offers a comprehensive range of enclosures that house these vital assets. Marketed under the nVent HOFFMAN and SCHROFF brands, our enclosures offer two-pronged protection: safeguarding electrical equipment from the operating environment and people from electrical hazards. Our expansive product portfolio ranges from modular marshalling cabinets to small junction boxes. Each defies dust, corrosive substances, temperature extremes, and the harmful effects of vibration and shock.

ABOUT OUR SCHROFF BRAND

The SCHROFF brand contains a broad product portfolio from printed circuit board (PCB) accessories, such as card retainers and extractors, front panels and handles to subracks, cases, backplanes, power supplies, cabinets and pre-assembled chassis for embedded computing systems. The nVent SCHROFF brand has been a world leader in electronics packaging for over five decades.

Compatible. Modular. Scalable.

THE INFRASTRUCTURE YOU NEED, WHEN YOU NEED IT

SCHROFF has been synonymous with innovation since it was founded in Germany in 1962, starting with the development of a euro board subrack system that helped make the 19" standard universal. nVent continues to pioneer electronic infrastructure for a wide range of applications today. Recognized worldwide, SCHROFF products meet national and international standards for electronics packaging and are in accordance with IEC 60297-3-x and IEEE 1101.x.

ENCLOSE. PROTECT. COOL.

From electronic cabinets, racks and subracks, to shock and vibration-resistant ruggedized solutions, you can count on SCHROFF products to safeguard your critical communications and electronics systems. We can also collaborate with you to customize our architecture to your specific project; for example, SCHROFF front panels with custom cutouts and colors are available in as little as 5 days through our Front Panel Express.

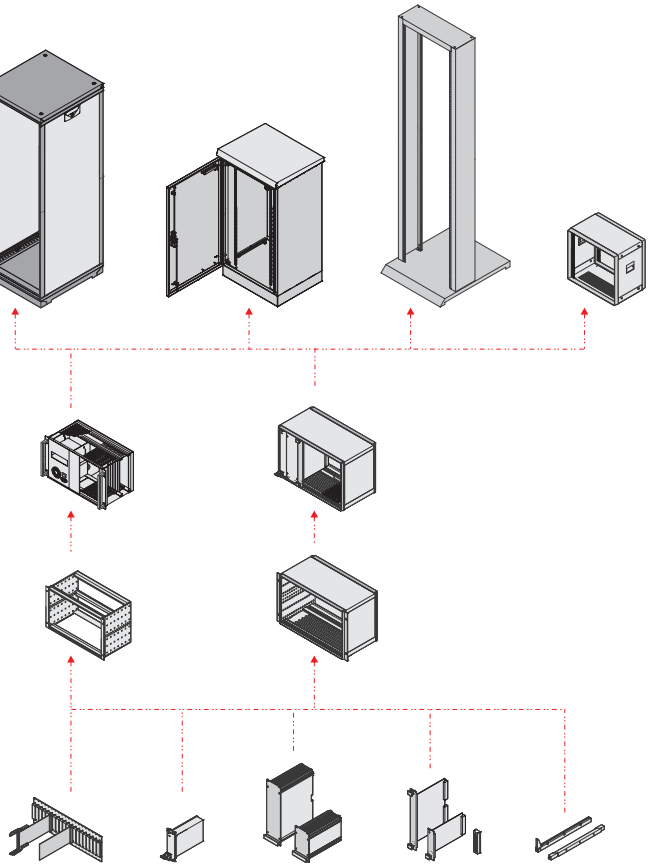
PIONEER IN 19" TECHNOLOGY: PRODUCT OVERVIEW

CABINETS

SYSTEMS

SUBRACKS AND CASES

BACKPLANES, FRONT PANELS, POWER SUPPLY UNITS, PCB RETAINERS AND ACCESSORIES

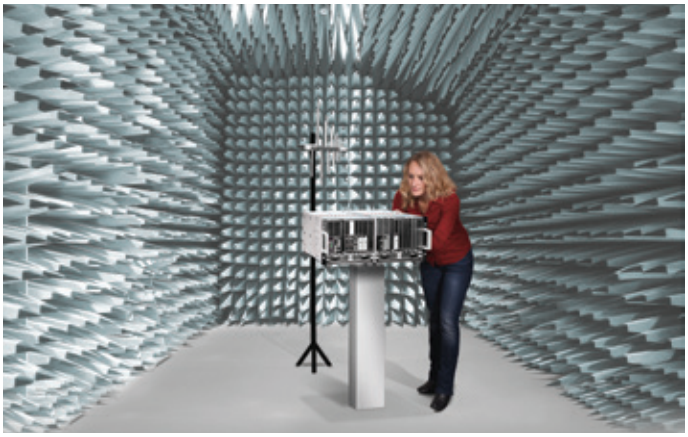


WE PROTECT YOUR ELECTRONICS: IN 19" AND BEYOND

As one of the leading innovators in 19", nVent is expanding its product range to other small form factor solutions beyond the classic 19" technology. nVent's SCHROFF branded Interscale product family reduces integration time with its innovative case design and accessories, and can be tailored to meet individual requirements. It's our way of offering flexibility for small and non-standard PCBs, and to deliver exactly what you need, when you need it.

At Home - Anywhere.

A BROAD RANGE OF PRODUCTS FOR A BROAD RANGE OF INDUSTRIES. OUR WORLD LEADING EXPERTISE ENABLES US TO DELIVER CUSTOMIZED SOLUTIONS, TO PROTECT SENSITIVE ELECTRONICS, IN A VARIETY OF INDUSTRIES.



GENERAL ELECTRONICS

THE LATEST IN STANDARDS-COMPLIANT PROTECTION

You have electronics to protect. We have solutions to match. With its SCHROFF brand, nVent offers one of the industry's most extensive portfolios of enclosures and accessories. Modular platforms can be configured to meet your general electronics protection requirements in accordance with IEC, IEEE, PICMG and VITA standards. With nVent's proven engineering knowledge and experience, nVent is the ideal partner for safe and reliable products and excellent support and service.

INFRASTRUCTURE

RUGGED PROTECTION FOR TRANSPORTATION

Global investments in infrastructure such as roads and railways continue to be strong. Within the rail industry, trackside, monitoring and traffic control solutions are also on the rise. With nVent, you have a reliable and experienced partner who can help you protect your vital systems from harsh outdoor weather, shock, vibration and EMI/RFI interference while complying with the latest standards. With its SCHROFF brand, nVent delivers component and system solutions for all your railway transportation technology needs in rail cars, on tracks, in signal boxes and data centers.

COMMUNICATION

CUTTING-EDGE DATA NETWORK INFRASTRUCTURE

When it comes to communication services, there is no room for downtime. nVent can help you secure your system with leading-edge solutions including data communication and telecommunication cabinets and systems. Solutions from nVent's SCHROFF brand not only protect your equipment, but also ensure highest efficiency, maximize service life, improve productivity and reduce maintenance with optimal total cost of ownership. These innovative product platforms are designed to accommodate increases in computing power per footprint and the packing density of your communications equipment.

MEDICAL & LABORATORY ENVIRONMENT

PROTECTION IN STEP WITH THE LATEST STANDARDS

nVent's proven experience offers you excellent protection solutions with one of the widest selections of enclosures to meet the needs of the medical industry. nVent offers a market-leading product portfolio for laboratory environments which enables precision measurement by providing shielding against radio frequency interference, keeping temperature in a defined bandwidth or simply stacking sensitive electronics in a protective manner.

SECURITY & DEFENSE

RUGGED SOLUTIONS FOR MISSION-CRITICAL SYSTEMS

nVent understands Defense Federal Acquisition Regulation Supplement (DFARS) compliance requirements and Defense Supply Center Columbus (DSCC) compliance requirements, so it can provide certification and procured part tracing for government programs. In short, nVent is a leading and reliable partner for complete mechanical, electrical, electronic and thermal solutions. With its SCHROFF brand, nVent offers a full range of ruggedized PCB retention and subracks solutions. COTS solutions are based on MIL-STD-901D, MIL-STD 167, MIL-STD 180 standards.

INDUSTRIAL

AUTOMATION ASSET PROTECTION MADE YOUR WAY

When you partner with nVent, a global leader in industrial automation and electrical systems protection, you benefit from our knowledge, experience and engineering expertise. With its SCHROFF brand, nVent offers a wide variety of products and over 6,000 readily available items. nVent's service model provides modifications based on standard products and completely customized solutions for Industrial Automation applications, as well as unmatched service and support.

Standardization. Innovation. Quality.

When you make a substantial investment in your equipment, you need to know it's protected. Our products help keep your systems running smoothly for the long term, backed by global service and sales support. The SCHROFF product portfolio consists of more than 6,000 standard products as well as tailored solutions with the lead times you need to keep your project on schedule. Solutions are developed, tested and certified to comply in countless countries and applications.

STANDARDIZATION

Since 1978, we have been actively involved with standardization committees pertaining to mechanical, electrical and communication interfaces for electronics equipment.

As an international company, with global customers, we feel responsible for the progress in standardization by implementing the latest technologies and converting them into standard platforms.

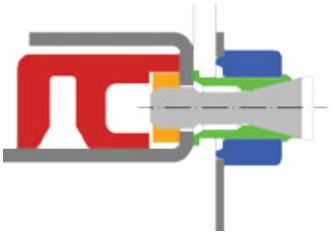
INNOVATION

About 30 inventions result in 96 patents all over the world.

Example: Patent EP 2077704-B1

Recommended in PICMG MicroTCA.1

(Air Cooled Rugged MicroTCA)



IN-HOUSE TESTS

- Static and dynamic load test in accordance with IEC 61587-1
- Material inspection
- Solt fog for corrosion resistance
- IP IEC 60529
- Electromagnetic shielding performance test in accordance with VG 95373
- Thermal simulations and modeling
- Air performance measurements including bulk air flow and acoustic noise
- Indoor and outdoor environment tests (in accordance with IEC 61969-3)
- nVent (IEC 62194-1)
- Climatic tests consist of a variety of temperature, humidity, and industrial tests
- Signal integrity tests (high speed backplanes)
- DVT (Design Verification Tests)

UNIQUE TESTS ESPECIALLY DEVELOPED FOR OUR PRODUCTS

Tensile tests for handles by customized test device and a test stand for air flow volume measurement specially developed by the University of Cologne in Germany.

ADVANTAGES

- Greater flexibility
- In-house tests allow faster innovation, assist in customer projects
- Precise and reliable test results through regular calibration by the manufacturer
- Ability for customers to participate during testing phase
- Focus on clean environment, care and maintenance
- Innovations show high level of maturity at an early stage

EXTERNAL TESTS

Seismic test in accordance with IEC 61587-2, MIL 167, MIL 810G, MIL 901D, IEC 61587 DL3

EVERYTHING FROM A SINGLE SUPPLIER

We offer a wide range of products from cabinets, subracks and cases up to complete systems.

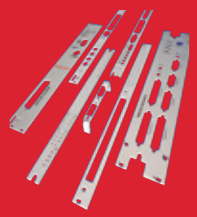
- Tests: in-house and external
- Workshops and trainings about standards
- Active participation in standardization organizations
- Experience and innovation ensure high quality in new development
- Greater flexibility for customized applications
- Downloads of test reports and white papers on our website available

Integration up to Level 5.

NVENT'S CAPABILITIES RANGE FROM LEVEL 0 - THE SUPPLY OF INDIVIDUAL PARTS - UP TO LEVEL 5 - FULL SYSTEM INTEGRATION. WE OFFER A RANGE OF PRODUCTS AND SERVICES AND ENSURE FLEXIBILITY FOR STANDARD, MODIFIED AND COMPLETELY CUSTOMIZED SOLUTIONS.

LEVEL 0: MECHANICAL COMPONENTS ONLY

Level 0 does not contain any integration; you receive individual parts for further processing and assembly in your own production facility.



LEVEL 1: MECHANICAL ASSEMBLY

Individual parts are built into a sub-assembly or case. This is delivered fully assembled. Common sub-assemblies and cases are available from stock as standard items.

LEVEL 2: ELECTRICAL AND MECHANICAL ASSEMBLY

Mechanical assembly of an enclosure incorporating customized design, manufacture and installation of components with minimal wiring and testing. This includes the provision of power, battery boxes and connector blocks, plus the installation of fans, cable harnesses and passive components.

LEVEL 3*: ELECTRONIC ENCLOSURE ASSEMBLY

Complete, electronically controlled sub-assemblies such as PSUs, complex cabling, backplanes, monitoring units and cooling solutions are assembled into a plug-and-play system. Function tests are carried out and documented on the complete system.

LEVEL 4*: TOTAL INTEGRATION

Plug-and-play systems are supplemented with active components and software. This level extends from installation of the software to commissioning of the devices. Smooth operation of the complete system is ensured and documented with extensive testing.

LEVEL 5*: COMPLETE INTEGRATED SOLUTION INCLUDING LOGISTICS

Fully operational systems, designed and configured to order, integrated with all active and passive components. National and international hubbing, distribution and logistics support is provided. The finished products are shipped directly to the OEM customer or to the end user, thus providing a complete solution.

*Level 3 - 5: Integration levels 3-5 are project-based as required by the customer

Modifications are our Standard.

DIFFERENT SERVICE LEVELS TO FULFILL DIFFERENT REQUIREMENTS

CHOOSE FROM OVER 6,000 STANDARD MODELS OR CREATE CUSTOMIZED ENCLOSURES WITH OUR SCHROFF SERVICEPLUS PROGRAM. OUR PRODUCTS ARE MADE WITH CARE IN ISO9001 FACILITIES THROUGHOUT THE WORLD, USING LEAN MANUFACTURING PRINCIPLES, TO ENSURE YOU GET THE HIGHEST QUALITY FOR THE BEST VALUE.

STANTDARD

Off-the-shelf solutions

- More than 6,000 items
- Local availability through more than 2,500 channel locations worldwide
- Free downloads available: test reports, certificates, CAD data etc.

MODIFIED

Platform products modified to meet a particular customer demand

- Different colors
- Different sizes
- Different screen printing
- Many types of cut-outs
- Short delivery time
- Different configurations

Based on standard catalog parts

CUSTOMIZED

Leverage engineering experience and expertise to develop solutions custom to the application

- Customized sizes
- Customized colors
- Customized screen printing
- Customized packaging
- Customized cut-outs
- Implementation of customer supplied parts into the housing

and much more...

Cabinets

Flexible Platforms.
Variety of Applications.

Varistar Electronic

Lab Rack

Novastar

Varistar Seismic

Varistar MIL

MULTI-PURPOSE ELECTRONICS CABINETS

Get the performance you want and the specifications you need with SCHROFF electronics cabinets. We offer steel and aluminum frame cabinet platforms with a wide range of dimensions and cover parts. Choose from different IP / NEMA protection levels, as well as options such as perforated cover parts, fan units and air-to-water heat exchangers. A RFI shielding option is also available for up to 60dB at 1GHz / 40dB at 3GHz. To complete your job, we can even assemble, integrate and test your mechanical and electrical accessories.

VARISTAR ELECTRONIC

- Open cabinets with decorative frame
- Doors and cladding for either IP20 or IP55 protection

VARISTAR EMC

- Best performance in RFI shielding up to 60dB at 1GHz
- Excellent attenuation with perforated doors and with cable entry accessories
- Test reports available for many cabinet configurations

NOVASTAR

- Esthetics combined with high functionality and innovation
- For the audio-video or broadcasting market as well as for laboratories and instrumentation and control technology

LAB RACK

- Open 19” frame for laboratory applications
- The most efficient way to install a subrack or chassis

EURORACK

- IP 40 ingress protection
- Bolted frame
- Flexible aluminum frame design

RUGGEDIZED CABINETS

SCHROFF ruggedized cabinets provide protection for mobile conditions on land, air or sea. These products are designed to withstand extreme environments while meeting the strictest safety requirements. We offer models to meet the needs of defense applications with high shock and vibration requirements, as well as a certified product platforms for MIL-STD-901D and earthquake resistance up to Belcore Zone 4. Other options include innovative IP / NEMA and EMC protection, and testing and design of required shock absorbers and stiffeners according to your requirements.

VARISTAR SEISMIC

- Earthquake-resistant cabinet up to Bellcore Zone 4
- NEBS compliant plinth
- Optional RFI-shielding

VARISTAR MIL

- Shock and vibration resistant for most demanding situations
- Tested to MIL-STD-901D
- RFI shielding to avoid electromagnetic interferences

SCHROFF branded cabinets are all designed to suit every application and market requirement. We offer the best protection for rack-mounted electronics.

Cutting-Edge Cabinets. Cooling Capabilities.

Varistar Server

Varistar Colocation

Varistar LHX 20

Varistar LHX 40

Varistar LHX 3

COMMUNICATION CABINETS

When it comes to protecting your mission-critical IT infrastructure, nVent has everything you need. From secure colocation cabinets, open frames and OSP solutions to flexible, approved cable management options - we offer a wide range of versions and dimensions. We also offer a rack-integrated air-to-water heat exchanger, as well as environmental monitoring and electrical access control options. In addition, you can count on us to assemble, integrate and test your mechanical and electrical accessories.

VARISTAR SERVER AND NETWORKING

- Wide range of networking and server cabinets
- Different versions in many dimensions
- Individual configurations from a variety of standard products within SCHROFF ServicePlus

VARISTAR COLOCATION

- Maximum access protection
- Flexible cable management

VARISTAR WATER COOLED CABINETS

- Highest cooling capacity on smallest footprint

CABINET COOLING

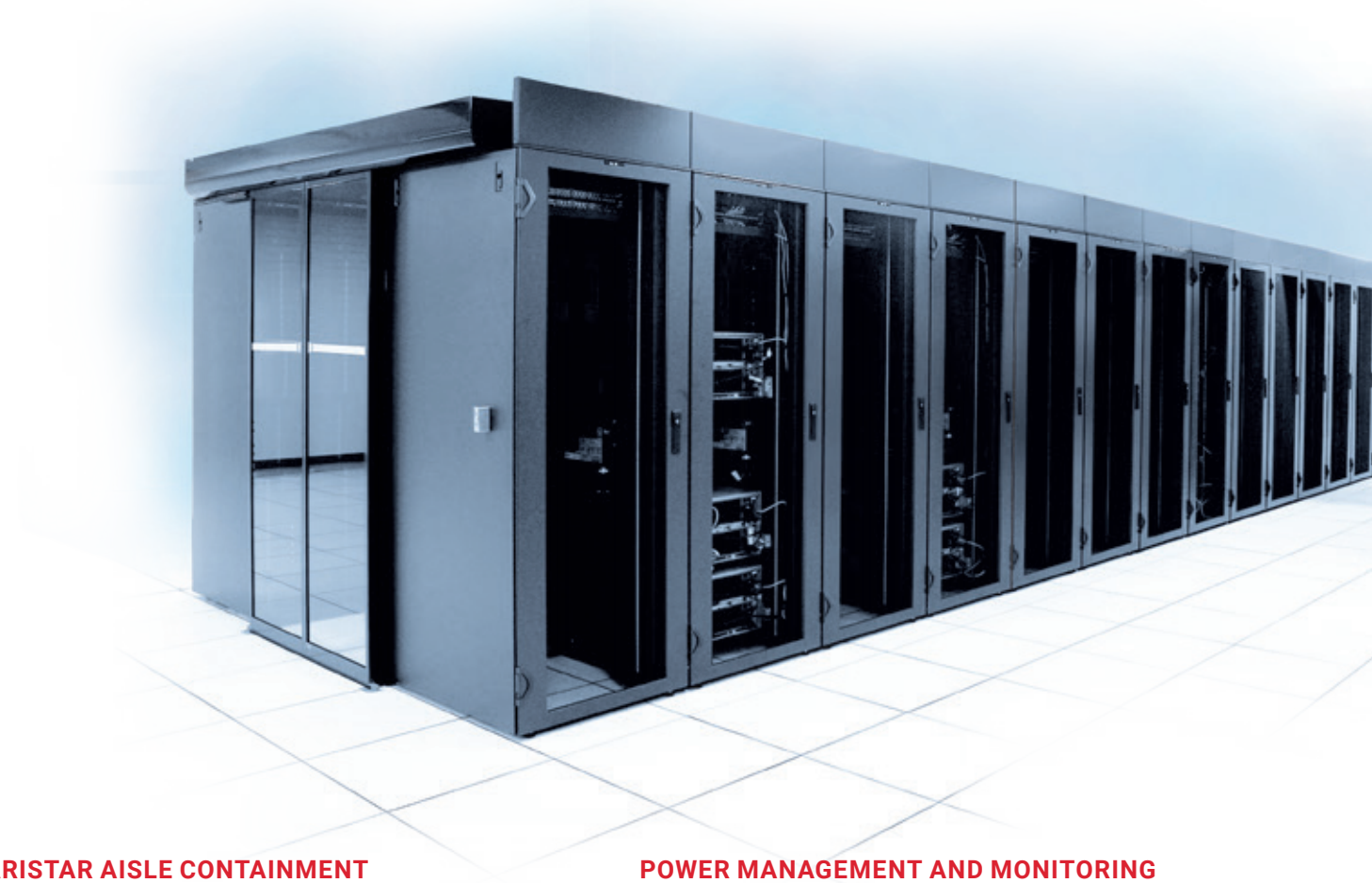
19" FAN TRAYS:

- To cool single components and assemblies in 19" cabinets
- High airflow rate for directed heat removal
- With axial or radial fans
- UL & CE approvals

AIR / WATER HEAT EXCHANGERS

- To increase the cooling capacity per rack in data centers or to provide cooling redundancy
- Most energy efficient devices with cooling capacity up to 40KW per rack
- Passive rear door heat exchanger
- Rack integrated active heat exchanger
- In-row heat exchanger

Efficient Space Utilization. Efficient Cooling.



VARISTAR AISLE CONTAINMENT

Creating custom aisle containments doesn't have to be a complicated process. Our standard components allow you to design a solution with minimal planning outlay and setup time. Choose from air management panels for server and networking cabinets, security glass doors, and various levels of access control from key to transponder cards. An in-row air/water heat exchanger is also available for containment cooling. Our qualified service technicians will support you during installation and commissioning.

JUST PLUG AND PLAY

Varistar SHX 30

IP/intelligent PDUs

POWER MANAGEMENT AND MONITORING

With nVent you find the power distribution solution to match your requirements — with compact modular construction and many functional elements. In addition to country-specific plugs and inserts, we offer additional IP addressable power strips for decentralized systems and emergency management as well as energy management and capacity planning. Choose from a variety of in-stock models available for immediate shipment, or customize your PDU for your requirements. We can even integrate products into your cabinets and test them for you before shipping.

POWER DISTRIBUTION UNITS

- Basic PDUs, optionally with switch or circuit protection functionality
- Intelligent PDUs with switching function for individual outlets and remote metering and monitoring on cabinets, phases and outlet-level

MONITORING

- Monitoring devices for both single cabinets or cabinet rows with a broad range of plug-and-play environmental sensors

Systems

Leading In Technology.
Leading In Variety.

AdvancedTCA,
front-to-rear cooling

AdvancedTCA 450/40

MicroTCA.4

AMC System

SYSTEMS

nVent offers a wide selection of standard systems, which can be individually adapted to your application. With SCHROFF systems, you obtain quality products that meet current and future demands for data transfer rates, cooling capacity and power supply. The available AdvancedTCA family with a 40Gb/s backplane is designed for 450W blades. Other standards, such as MicroTCA, CompactPCI Serial and VPX, have also been successfully tested for transfer rates up to 40 Gb/s. Can't find the exact product you need? Configure your desired system using our System Selection Tool.

ADVANCEDTCA

- Standard product offering includes 2, 6 and 14 slot counts, AC, DC or combined AC/DC power input and up to 450 W/slot cooling capability
- 40Gb/s high-speed data transfer on all standard product offerings with a variety of backplane topologies
- Redundant architecture and powerful system management provide 99,999% system availability
- Product portfolio is NEBS compliant and UL recognized

MICROTCA

- MicroTCA standard product portfolio includes systems designed to MTCA.0, MTCA.1 and MTCA.4 specifications
- 40Gb/s high-speed data transfer and multiple backplane topologies available in standard product offering
- Available in multiple form factors from 19" rackmount to small form factor cubes, pico and desktop cases
- Full range of hardware and accessories from card guides to filler modules

YOUR ADVANTAGES:

- Quicker to market at less cost. Irrespective of the technology you choose, our complete systems offer you decisive advantages. In addition to reduced development costs, you profit from short development and manufacturing times. We reduce your lead time for verification and testing to a minimum, as we have already conducted tests on many of our off-the-shelf products.
- Dependable system function. Despite rapid development times and low prices you can rely on the quality operation of the system. Since we have leading expertise in both mechanics and electronics, with SCHROFF systems you can be sure that the backplane, chassis, cooling, power supply and system management, including all interfaces, are optimally matched to one another.
- Safety and protection. Our off-the-shelf products can be individually customized for higher EMC protection, shock and vibration resistance and even earthquake resistance.

Leading In Technology.
Leading In Variety.

Rugged conduction cooled

CompactPCI
Serial

VME64x

VME64X, VXS, VME, VPX

- Full range of VITA standard products for 3U & 6U boards
- Available in multiple form factors from 19" rackmount to small form factor and desktop cases
- Systems for vertical and horizontal alignment of boards with option of embedded or pluggable power supply units

COMPACTPCI AND COMPACTPCI SERIAL

When it comes to CompactPCI-based systems, nVent has you covered with a broad range of legacy systems, state-of-the-art systems, as well as systems for communication with PSB and H.110.

- Standard product families includes CompactPCI, CompactPCI Serial, PSB & H.110, PXI and CompactPCI PlusIO systems for 3U and 6U boards
- Available with up to 32 Gb/s data transfer with the latest technology standards
- Systems available with embedded or pluggable power supply units

RUGGED SYSTEMS

- Platform designed to protect electronic systems in harsh environments where shock and vibration, water and dust requires alternative cooling methods and robust design
- Ruggedize any bus architecture by leveraging proven and tested technology
- Intended for applications in transportation and industrial environments where electronics require extra protection and cooling is a challenge
- Conduction cooled and air-cooled versions available depending on project needs

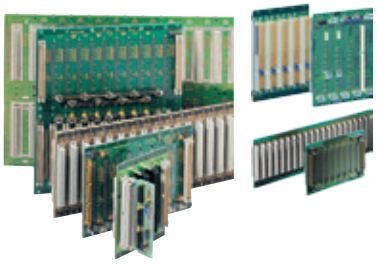
CONFIGURE YOUR SYSTEM

https://schroff.nvent.com/en/schroff/cad-configurators

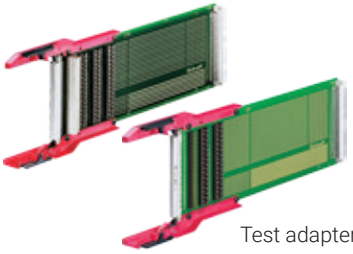
SYSTEM SELECTION TOOL FOR VITA AND PICMG SYSTEMS

Configure your system to perfectly match your application.
You can select several backplane configurations, chassis styles, mechanical features, cooling options and
power supply implementations to adjust the system to your needs.

Rapidly Customized. Quickly Delivered.



Backplanes



Test adapters

AC/DC linear regulators

AC/DC switch-mode PSUs

BACKPLANES

nVent offers standard VITA- and PICMG-compliant backplane families such as CompactPCI, CompactPCI Serial, VME and VPX. SCHROFF backplanes feature excellent signal integrity and are designed for the highest data transfer rates specified e.g. CompactPCI Serial backplanes support PCIe Gen 3, and VPX backplanes support Rapid I/O up to 6.25 Gbaud. All our backplanes can be supplied with a protective (conformal) coating on request. nVent offers customized solutions based on our off-the-shelf backplane range of products.

- ATCA & MicroTCA 40Gb/s backplanes in multiple topologies with lower layer counts than earlier versions
- New CompactPCI Serial and Legacy 32 and 64-bit CompactPCI backplanes as well as combination CPCI Serial + CPCI available in multiple slot counts for 3U & 6U board sized
- PSB & H.110 backplanes for communication applications available
- CompactPCI bridges und CompactPCI secondary backplanes available for increasing the slot count beyond 8 slots
- PXI backplane family with bridges for test and measurement applications
- Full range of VME & VME64X backplanes in multiple slot counts and versions for 3U and 6U boards
- VPX & VXS backplanes for applications according to the latest VITA specifications
- Universal and power backplanes for several applications

POWER SUPPLY UNITS

- Full range of products for high-efficiency power solutions
- 19" pluggable PSU's with 1 to 3 outputs for convection cooling up to 180W (AC/DC) or 100W (DC/DC)
- 2 switched-mode PSU families: The Maxpower family together with the Slimpower with wide range AC input, the Coolpower PSU family with wide range DC input
- Linear regulators product family with low interference for sensitive measurement systems and medical applications
- Pluggable and open frame PSU's for CompactPCI Serial, VME/VME64x and MicroTCA systems

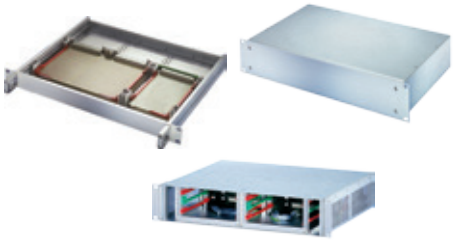
TEST ADAPTERS

- SCHROFF test adapters enable the testing of active boards while installed in a running system
- Extender boards include fields for measuring current, voltage, or both, as well as measurement of single signals
- Wide range of standard adapters including multiple connector types in 3U, 6U and 9U heights
- All test adapters include rugged board guides to firmly hold boards in place during testing

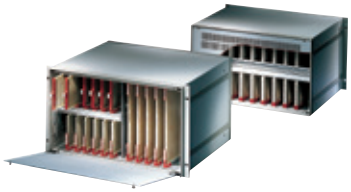
Subracks and Cases

Wide Range of Platforms. Tailored Solutions.

EuropacPRO



MultipacPRO



Inpac

SUBRACKS AND 19" RACK-MOUNT CHASSIS

SCHROFF subracks and 19" rack-mount chassis offer a flexible platform for military, telecom, transportation and test and measurement applications. Many products offer market-leading RFI shielding, and are offered in kits that can be enhanced with a full range of accessories or can be modified using individual components.

- Market-leading RFI shielding option on the subrack-level up to 30dB at 2GHz
- Customization made easy: sizes, colors. cooling and much more
- Extensive range of accessories compatible with all subracks and cases of the PRO series

SCHROFF subracks ensure versatile and rugged protection for 19" and individual electronic assemblies. With modular construction, a wide range of standard, modified or customized options available, subracks are ideal for a variety of applications. Applications range from standard industrial to robust transportation, light military use and rugged-level products. For enhanced protection, models are also available with shock and vibration resistance and EMC shielding.

OVER 50 YEARS OF EXPERIENCE

EUROPAC PRO

- Modular subrack
- Tailored versions for test and measurement, industrial, military, mobile or rugged applications
- Designed to IEC 60297-3/-100.x and IEEE 1101.x
- IP 20 to IEC 60529, EMC to VG 95373, shock and vibration resistance up to 25g, EN 50155, MIL-STD-167, IEC 61587 DL 3, MIL-STD-810C, MIL-STD-901D

MULTIPAC PRO

- 19" chassis for non-standard components and horizontal board constructions
- Aluminum version for appealing aesthetics or sheet metal for most economic design
- Designed to IEC 60297-3/-100/-101/-105
- IP 20 to IEC 60529, EMC to VG 95373

STABILITY WITH DESIGN FLEXIBILITY

INPAC

- 19" chassis or desk-top case for standard or non-standard board formats
- Designed to IEC 60297-3-101
- IP 20 to IEC 60529

Multiple Designs.
Various Applications.

RatiopacPRO

PropacPRO

CompacPRO

19“ - A SCHROFF INNOVATION

SCHROFF instrument and system cases provide fully functional, stylish enclosures. Compatible with a vast range of accessories, cases can be configured to meet most applications requirements using standard catalog components. Whether it is a CompactPCI, VME, or proprietary application, the SCHROFF case family has an off-the-shelf solution in portable, desk-mount or rack-mount configurations to meet your requirements.

- Portable, desk-top and 19” cases in different designs to complement your product‘s esthetics
- Multiple modification and customization options
- Platform-based solutions for multiple markets
- Very low weight (aluminum) suitable for mobile applications
- Accepting PCBs conforming to IEEE 1101.x and IEEE 60297.x or non-standard applications

Comptec

19” TABLE-TOP AND TOWER CASES

RATIOPAC PRO / RATIOPAC PRO AIR

- Desktop, tower or rack mount solutions with flexible height, width and depth dimensions
- Designed to IEC 60297-3/-100/-102 and IEEE 1101.x, CompactPCI and VME64x compatible
- IP 20 to IEC 60529, EMC to IEC 61587-3
- Esthetic design with symmetrical construction and no visible screws
- Integrated fan cooling options available
- Advanced cooling options for RatiopacPRO AIR

PROPAC PRO

- Desktop case with robust die-cast frame
- Designed to IEC 60297-3/-100/-101
- IP 20 to IEC 60529, EMC to IEC 61587-3

COMPAC PRO

- Desktop case with robust die-cast frame
- Designed to IEC 60297-3/-101
- IP 20 to IEC 60529
- Lightweight, non-EMC-shielded alternative to PropacPRO

COMPTEC

- Desktop case with robust die-cast frame; designed to accept subracks
- Designed to IEC 60297-3/-101
- IP 20 to IEC 60529
- Steel or lightweight aluminum versions available for mobile applications

Small form Factor Cases

THE FORM FACTOR FOR THE FUTURE

The Interscale M platform is the latest addtion to the SCHROFF case portfolio. They are extremely flexible and offer different mounting and installation options. The interior is easily accessible, for quick and easy installation of printed circuit boards. A variety of cooling options and excellent EMC protection round out the program.

THE FLEXIBLE PLATFORM SOLUTION

INTERSCALE M

- Available in standard, modified or custom designs
- Desktop, wall mounted, or rack mounted solutions
- Quick and easy assembly / disassembly with only two screws
- Removable front and back panel
- Integrated EMC protection
- 21 standard sizes from stock; other sizes available on request
- Full suite of accessories for a complete enclosure solution

THE SECRET OF INTERSCALE M:

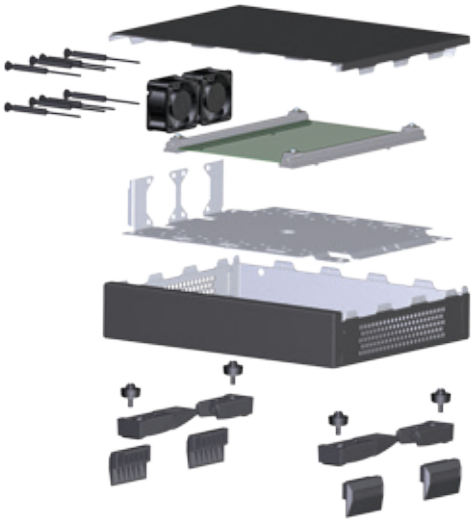
SIMPLICITY AND INNOVATION IN ONE PACKAGE.

MINIPAC

- Extruded aluminum enclosure
- Desktop, wall mounted, or DIN rail
- Available in rectangular or other shapes
- Modification options include color, printing and cut-outs
- IP 40

INTERSCALE M ACCESSORIES

- Mounting plate for simple integration of PCB in the case
- Flexible rail system for assembly of PCBs when prototyping
- Fan adapter kit
- Mounting plate with integrated fan adapter kit
- Rubber feet, stacking aids, or wall mounting brackets, and 19“ rack mounts available
- Assembly kit for opening the case and unbolting the screws



DESIGN YOUR CASE WITH OUR SCHROFF INTERSCALE M CONFIGURATOR

Board Level Components

Wide Range of Products. Variety of Options.

Front panels

Cassettes

Plug-in units

FRONT PANELS

- For fitting in subracks, cases and systems
- Extensive standard range with various finishes and materials (aluminium or stainless steel)
- EMC shielding retrofittable
- Conform to standards e.g. CompactPCI, AdvancedTCA, VME, AdvancedMC™, VME64x, PMC, VXS and VPX systems
- Modifications include custom cut-outs, handle option, EMC gaskets, silk screening, hot-swap microswitch installation and assembly and kitting
- Front Panel Express: Fast delivery service of customised versions (in as few as 2 days)

PLUG-IN UNITS

- Front panel kits which include the front panel, handle and all hardware required to fix the front panel to the subrack
- Designed to IEC 60297-3/-101/-102/-103, IEC 1296 and IEEE 1101.1/x, VITA 29 (IEEE P1386), VITA 57.1
- Handles are designed for various applications, and feature up to 1500N of insertion/extraction force
- Models available with IEL/IET handles for CompacPCI and VME64x applications

CASSETTES

- For the protection of one or more printed circuit boards from mechanical and electromagnetic influences (EMC)
- Designed to IEC 60297-3-101 / IEEE 1101.1/11
- Ideal for second level maintenance

FRONT PANEL EXPRESS - AVAILABLE IN 1 WEEK

SCHROFF front panels are resistant to scratches, finger prints, environmental forces to the front and offer EMC conductivity in the back.

Front panels usually need to be modified, as the connected board will require openings for LEDs, connectors or switches and will be printed individually. nVent offers a Front Panel Express service, a fast modification service for prototypes and production runs of 25 items or less..

Secure, Reliable Protection.

Wedge Tainer

Card Loks and
Wedge Loks

Metallic and
non-metallic card guides

Inserters and extractors

BOARD RETENTION

SCHROFF Calmark and Birtcher retainers are designed to secure the printed circuit board within an enclosure.

nVent offers a wide variety of Calmark and Birtcher PCB retainers, from general electronics applications in a basic sheet metal enclosure to rugged, high shock and vibration applications in a conduction cooled enclosure.

CARD-LOK AND WEDGE-LOK

- Designed for cold wall applications
- For rugged, heavy shock and vibration environments
- High clamping force and heat dissipation
- Screw or lever actuated
- Torque-limiting models available for second level maintenance
- Many options to modify/customize based on your application requirements

AS9100 revision C and ISO 9001:2008 certified

WEDGE TAINER

- For use in cold wall or sheet metal applications
- Useful where the retainer cannot be mounted to the PCB, or where a machined cold wall slot is not available, or not desired to reduce costs
- For rugged, heavy shock and vibration environments
- High clamping force and heat dissipation

LOK TAINERS

- Cold wall and sheet metal (non-cold wall) designs
- For moderate shock and vibration environments
- Feature a cam and lobe design for PCB retention
- Available with screw or lever actuation

PCB TAINERS

- Designed for sheet metal (non-cold wall) applications
- For lower shock and vibration environments
- Feature spring action PCB retention
- Typically screw or rivet mounted to a sheet metal chassis

NYLON CARD GUIDES

- Designed for sheet metal (non-cold wall) applications
- For low shock and vibration environments
- Economical option for board retention
- Feature zero-entry force, extra deep guide, wide lead-in, and snap in design for simple installation and use
- Narrow profile for excellent airflow

INSERTERS AND EXTRACTORS

- Many designs to choose from
- Options for both sheet metal and cold wall applications
- Constructed of nylon or 6061-T6 aluminum alloy
- Up to 8:1 mechanical advantage
- Customized labeling and various surface finishes available

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For more information: nVent.com

Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER

nVent

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SCHROFF-SB-39601812-ProductOverViewBrochure-EN-1805