BRESSNER

A ONE STOP SYSTEMS COMPANY

SYSTEM INTEGRATION & HARDWARE SOLUTIONS

Over 30 Years of Excellence

Product Catalog and
Image Brochure

ISO 9001 CERTIFIED

System Integration & Value Added Distribution for over 30 Years

As a system integrator and value-added distributor, BRESSNER Technology has developed a comprehensive product and service portfolio in the industrial hardware solutions sector over the past 30 years. We serve industries where standard hardware falls short with our highly specialized hardware systems and components. With our constantly expanding partner network and keen sense of technological advancements, we can provide state-of-the-art hardware solutions for virtually any application.
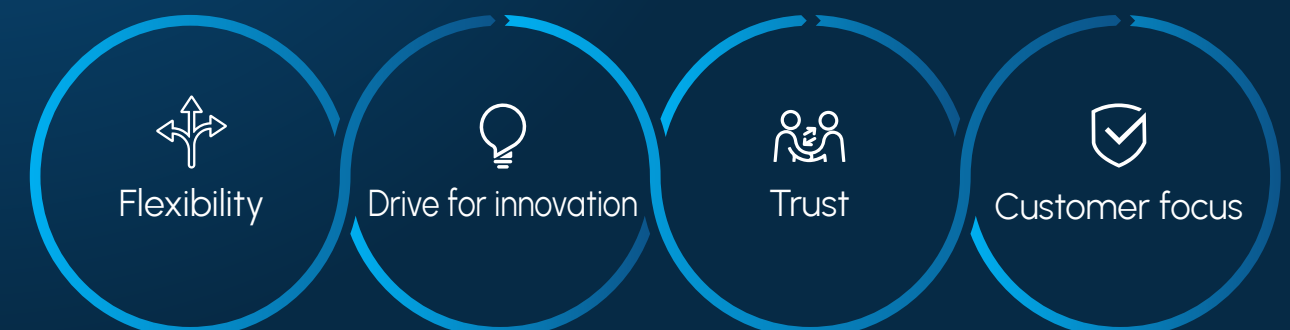
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Mission

Our goal is to act as a driving force for innovation in the industrial hardware sector and leverage our 30 years of experience for the benefit of our customers. To achieve this, we integrate our portfolio of customizable, cutting-edge hardware solutions, comprehensive services, and a deep understanding of our customers' requirements into a significant value add.

This contributes to the sustainable growth of our customers and fosters innovation and shared success in the industrial sector. Achieving our customers' goals is always our top priority.

Vision

As an established player in the industrial hardware market, it is our vision to continuously push the boundaries of what's possible, enhancing the efficiency, safety, and intelligence of our customers' business processes.

We leverage our extensive experience and profound technical expertise to deliver high-quality, innovative solutions, providing our customers with first-class service and groundbreaking expertise in future technologies.

Flexibility Drive for innovation Trust Customer focus

Services & Consulting

„Achieving our customers' goal is always our top priority."

To fulfill this promise, we leverage our comprehensive experience and combine our extensive portfolio of customizable hardware solutions with a wide range of pre- and post-sales, testing and certification, as well as customization services to provide a real value add. This ensures the success of your project, whether large-scale projects or small-batch.

- Free **consultation**
- Highly-specialized **product portfolio**
- Years of **expertise**

Value Added
Services for
Your Success

Consulting service

Guaranteed free consultation for your project

› Individual consultation and solution finding
› State-of-the-art solutions
› Product presentation and lending service
› Industry and technology experts
› Via phone, video call, or on-site

Built-to-order systems

Designing, developing, and manufacturing customized systems

› Hardware and software development
› Prototyping and validation
› Quality control and testing
› Documentation and certification
› Production and supply chain management
› Service and maintenance

Lifecycle management

Professional lifecycle management service for reliable system and component availability

› Product Change Management
› Ensured availabilities (beyond market availability)
› End-of-Life Monitoring

RMA services

Return, repair, and replacement of malfunctioning hardware under warranty inspection

› Fault analysis and diagnosis
› Repair and replacement
› Warranty inspection and processing
› Firmware and software updates
› Data backup and recovery
› Logistics and return management

OEM & ODM design

Development and design of custom-made products for your application

› Large-scale projects and small batches
› Prototyping and sample testing
› System assembly
› Mass production

Testing & certification

Comprehensive validation and certification services

› 12 to 48 hours stress tests
› Generation of test reports
› Providing certification documents
› Support for certifications and regulatory challenges

Repair & replacement

Comprehensive inventory management to streamline return processes, minimize downtime, and ensure the success of your business

› Spare parts service
› System repair service
› Hot-swap program for systems

Global service network

Our global expert network enables us to provide worldwide support

› Network of IT experts, manufacturers, and suppliers
› Service teams
› On-site – Anywhere in the world

Rugged AI Solutions

To fully harness the full spectrum of AI potential even under extreme conditions, we offer resilient AI systems designed for use in harsh, remote, and mobile environments.

The latest graphics cards and PCIe technology, along with powerful processors integrated into rugged enclosures with sophisticated ventilation and cooling systems, enable our systems to deliver high computing power and real-time data processing, making them suitable for the most demanding AI and machine learning workloads. Whether on water, land, or in the air.

Ruggedized design

› Shock and vibration resistance & extended temperature range
› Aluminium / composite enclosure and retention bars for GPUs
› In-house engineering & testing
› Variable power supply via AC/DC & DC/DC

Remote management (U-BMC)

› Configuration, user management, updates, data logging, remote access
› Resource monitoring, alerts, performance data collection
› Remote and hardware control, access restriction, automation

Liquid and immersion cooling

› Direct-to-chip cooling option
› Single phase immersion
› Two phase immersion
› Hybrid solution available

State-of-the-art PCIe / GPU standards

› Available with PCI Express standards Gen 5 and higher
› Support for the latest GPU models (e.g., NVIDIA® RTX or Quadro®)
› Comprehensive NVIDIA® solutions and SDKs for AI applications

NVIDIA PREFERRED SOLUTION PROVIDER
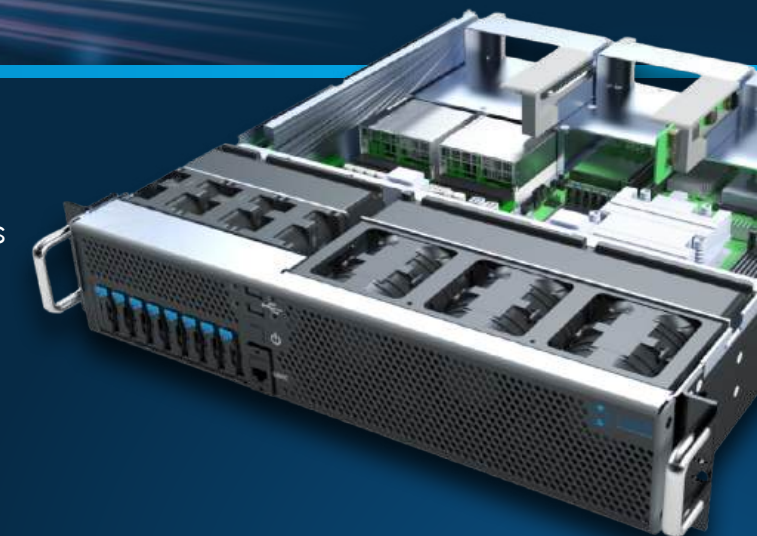
Bringing the Datacenter to the Ruggedized Edge

Rugged AI Servers

High performance compute and storage systems for environments outside of the datacenter

› Optimized for AI inferencing and machine learning
› Integration and scalability of multiple GPUs
› Support for various GPU types and models
› Proven rugged design
› Expandable with GPUs, memory, or network cards
› Customization of systems to meet your requirements

Rugged datacenter performance on water, land, and in the air
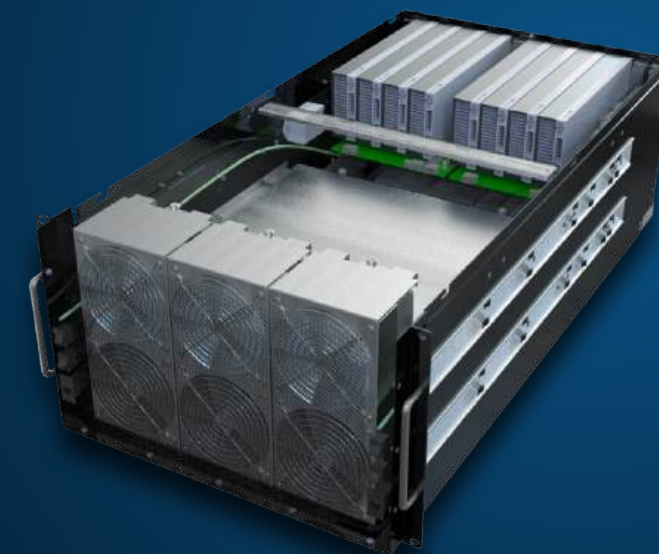
PCIe Gen 5.0 2U-SDS (Short-Depth)

GPU Expansions

Advanced high-speed expansions for connecting servers and PCIe devices

› Expand existing servers with up to 16 GPUs
› Fully configurable solutions for PCIe-based systems
› Additional GPUs for increased computational power
› OS independent (no drivers required)

Flexible performance upgrade for existing server environments

6U Gen 5 PCIe Expansion (up to 16 double-width GPUs)

Short Depth Server (3U / 2U)

AI-enabled Rugged PCIe Gen 5 Short Depth Server for high-end performance in compact form factor

Air, liquid or immersion cooling

› Air cooling: Ruggedized fan cooling
› Liquid cooling: Direct-to-chip liquid cooling
› Immersion cooling: Cooling by immersion in coolant (single- or two-phase)

ONLY
20-INCH
SERVER DEPTH

Available as 3U or 2U versions

Rugged server design

› Size and weight optimized aluminum chassis with a depth of 47cm / 18.5"
› Resilient frame-in-frame design
› MIL-STD-810G certified

High performance GPUs

› Integrate up to four 350W GPUs
› State-of-the-art server-level GPU models
› Comprehensive NVIDIA® solutions and SDKs for AI applications

Hot-swap storage

› Removable hot-swap storage canisters
› Up to 16x SATA / SAS / NVMe drives
› Up to 1 petabyte NVMe storage with 64 GB/s (16x 64 TB NVMe)

Remote management (U-BMC)

› Configuration, user management, updates, data logging, remote access and automation
› Resource monitoring, alerts, performance data collection

PCIe Gen 5 standard

› Up to 7x PCIe x16 slots
› Up to 4x dual-slot GPUs
› Up to 320 GB/s GPU computing power

Customization

› Configurable front and rear panels
› Advanced power supply up to 400Hz AC
› Immersion, liquid, or air cooling options available
› Customized solutions as an option

Custom Application.
Custom Server.

Gen 5 3U SDS Dual Drive Packs

› Data logging configuration with a focus on storage
› Up to 2x 350W GPUs + standard NIC / RAID / FPGA I/O
› Up to 16 NVMe / SATA drives (2x hot-swap canisters)

Gen 5 3U SDS One Drive Packs

› Balanced GPU / storage configuration
› Up to 4x 350W GPUs + standard NIC / RAID / FPGA I/O
› Up to 8 NVMe / SATA drives (1x hot-swap canister)

Gen 5 3U SDS Zero Drive Packs

› Configuration with a focus on GPUs and inputs/outputs
› Up to 4x 350W GPUs plus 75W per slot for I/O options
› Two swappable NVMe / SATA / M.2 drives

PCIe Expansions

Discover the world of high-speed connectivity with PCI Express (PCIe) - the standard for connecting servers and PCI Express devices. Our PCIe expansions not only offer superior performance compared to USB and Ethernet, but also stand out for their reliability and cost-effectiveness. With PCIe expansions, there is no need to install additional software, resulting in minimal overhead and low latency.

Expansion Systems with up to 16 Slots

OS independence

› Standalone expansion units
› No drivers required
› Compatible with a variety of servers

Windows OS   Linux OS

Gen 5 4U Pro
4U rugged GPU accelerator
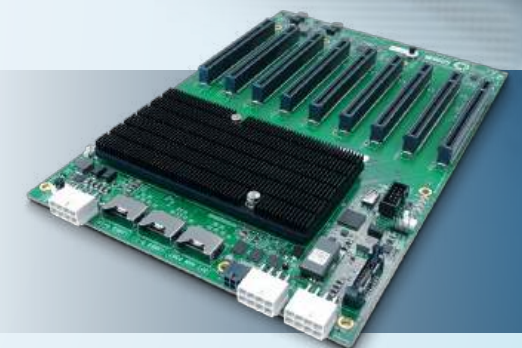
› Rugged frame design
› Remote management (U-BMC)
› Dynamic fan speeds
› Customizable slots and host connections
› Expansion for the entire AI workflow at the edge

Ruggedized design

› Shock and vibration resistance & extended temperature range
› Aluminium / composite enclosure and retention bars for GPUs
› In-house engineering & testing
› Variable power supply via AC/DC & DC/DC

PCIe Backplanes
Gen 5 expansion boards

› Easy to integrate into existing facilities and infrastructures
› PCIe x4, PCIe x8, or PCIe x16 lanes
› Up to eight Gen 5 slots (x8) or Gen 4 slots (x4, x8, or x16)

PCIe x8 Gen 5 8-slot expansion backplane

Daisy chaining

› Flexible chaining of multiple systems
› Increased scalability and performance for supercomputing applications

PCIe-over-Cable
Complete expansion kits with a cable set and two adapter cards

› Connect computers and peripherals locally via host-to-target
› PCIe / Mini-SAS cables up to 300 meters
› Up to 64GB/s unidirectional bandwidth (Gen 5)
› Customizable expansion kits

PCIe Gen 5 slots

› Market-leading bandwidth of 32 GT/s
› Backwards compatibility and future-proof
› Gen 5 backplanes with PCIe bifurcation for doubled data throughput

PCIe x16 Gen 5 host-to-target expansion kit

Embedded PCs

Our embedded PCs are specifically designed for harsh industrial environments and are typically used for control, regulation, or monitoring functions as well as data and signal processing.
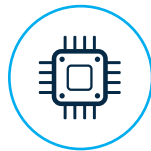
To always provide you with the appropriate solution for your application, our systems vary in performance classes, sizes, protection classes, and interfaces, and can be customized to your needs. By constantly using the latest hardware technologies, our systems offer state-of-the-art performance and are equipped for future applications such as artificial intelligence, autonomous driving, and complex machine learning functions.

Next Gen Hardware for Maximum Performance in the Industry

Windows 11 READY

Fanless
› Passive cooling using heatsinks
› Active cooling without dust accumulation

High performance
› State-of-the-art CPU technologies
› Intel®, AMD®, or ARM® processors
› AI accelerators like Jetson Orin™ available

Rugged design
› Shock and vibration resistance
› Available IP ratings from IP65 up to IP69K
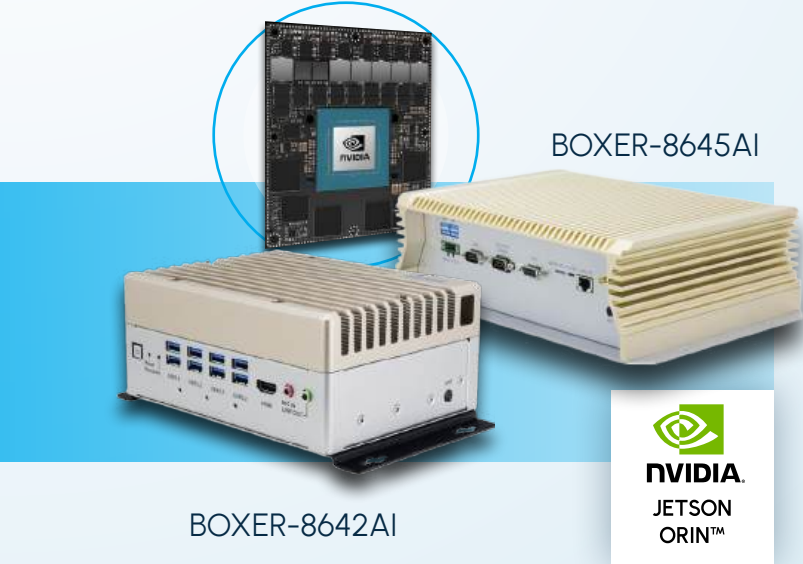› Extended temperature range

Edge AI GPU Computers
Supporting GPUs up to 450W

› Integrated graphics cards for fast and efficient data processing
› Support for NVIDIA® or AMD® GPUs (single-width or double-width)

NVIDIA GEFORCE RTX

PE8000G

Expandable
› Comprehensive PCIe or PCI slots
› Wireless modules e.g., for Wi-Fi, GPS, or 5G
› High scalability

Customizable
› Custom configurations of CPUs, memory, mainboards, or connections
› Free consultance

Flexibility
› Reliable operation
› Modular systems for a wide range of applications

BOXER-8645AI

NVIDIA® Jetson Orin™ Platforms

› Compact system-on-module systems for developers
› Scalable solutions with integrated high-end AI accelerator
› Ideal for edge computing, industrial IoT, industrial automation, or medical computing

BOXER-8642AI

NVIDIA JETSON ORIN™

Embedded PCs with PCIe / PCI Expansions

› Full utilization of PCIe Gen 4 bandwidth
› Extensive peripherals configurable with up to seven PCIe slots
› Expand your system with interfaces such as USB, GbE LAN, Power-over-Ethernet, and UPS
› Expandable with protected M12 connectors

Simultaneous control of machinery, displays, and peripherals

Nuvo-10000 series

IP69K
Maximum Water and Dust Protection

SEMIL-2000 series

DIN Rail PCs

› Compact enclosures for simple mounting on standardized DIN rails
› Easy to integrate into existing infrastructures
› Perfectly suited for industrial environments
› Well-equipped for controlling machinery or for data acquisition and processing

Durable and low-maintenance designs for stable operation over years

POC-700

Embedded PCs with IP Rating

› IP65 up to IP69K protected enclosures
› Outstanding ruggedized construction with heat-dissipating housing
› MIL-STD-810G certification
› Protected M12 connectors
› Power-over-Ethernet ports as an option

IP69K allows cleaning with high-pressure / steam jets from any angle

Nuvo-9650AWP & NRU-162-AWP

Vehicle Computers

› Ideal for use in any kind of vehicle
› Stable mounting options, e.g. within the trunk
› Suitable for applications such as measurement technology or autonomous driving
› Expansion options with Wi-Fi, 5G, or GPS modules for optimal onboard communication

4x 2.5-GbE ports Power-over-Ethernet / PSE 802.3 af/at for onboard controllers

VPC-5640S

Industrial Mini PCs

› Ultra-compact, fanless high-performance computers for space-constricted industrial applications
› Essential connection types such as HDMI, GbE LAN, USB, and serial ports are included
› Efficient architecture for data processing, machine control, and other demanding tasks

Fanless space-saving mini computers with versatile connectivity options

EBS-P300W

Rack Servers

Rack servers provide a powerful platform suitable for various compute-intensive applications. Our industrial PCs can be integrated into different environments to achieve scalable performance while leveraging potential cost savings. Additionally, our rack servers feature a robust design with high reliability, specifically optimized for continuous operation in server rooms. Our customization service allows for customer-specific adaptations to the chassis, motherboard, processor, memory, and storage capacity.
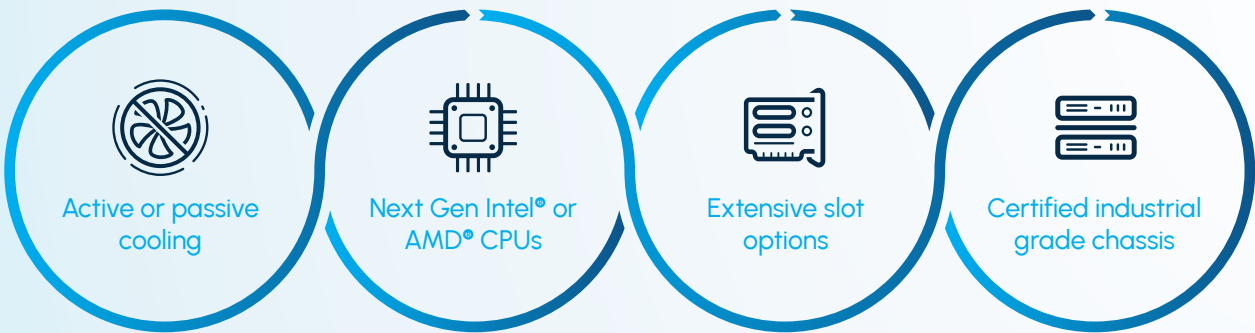
Windows 11 READY

High-Performance
19-Inch Industrial PCs for Automation

State-of-the-art technologies

› Next-gen processors from Intel® or AMD®
› Latest motherboard standards including TPM 2.0
› Continuous hardware upgrades and expansion of our product series

Fully customizable system designs

› Configure your personal server
› Individual processors, motherboards, enclosures, power supplies, fans, drives, storage, memory, expansion cards, and more available

Active or passive cooling

Next Gen Intel® or AMD® CPUs

Extensive slot options

Certified industrial grade chassis

Our Basic Configurations

	Entry	Basic	Pro	Ultra
Rack Unit	2U (88.9mm / 3.5") or 4U (177.8mm / 7")			
CPU	Intel® Core™ Ultra 3 Series	Intel® Core™ Ultra 5 Series	Intel® Core™ Ultra 7 Series	Intel® Core™ Ultra 9 Series
RAM	8GB DDR5 4,800MHz (up to 128GB)	16GB DDR5 4,800MHz (up to 128GB)	32GB DDR5 4,800MHz (up to 128GB)	64GB DDR5 4,800MHz (up to 128GB)
Storage	incl. M.2 SSD 500GB	incl. M.2 SSD 1TB	incl. M.2 SSD 1TB	incl. M.2 SSD 2TB
Mainboard	ASUS Q670EA-IM-A with Intel® Core™ 14th Gen. ASUS Q670EA-IM-A with Intel® Core™ 13th Gen.			
OS	incl. Windows 10 IoT Enterprise LTSC 64-bit, Linux or server OS optional, Supports Windows 11 installation			

2U PANTHER series

2U to 4U Rack Servers
Next Gen hardware for server racks

› Powerful 19-inch rack servers with latest technologies for maximum performance and efficiency
› Suitable for demanding workloads and flexible deployment in your infrastructure
› Built-to-order systems with easy plug-and-play installation

4U TIGER series

1U Rack Servers
Next Gen hardware with compact design

› Powerful 19-inch hardware with comprehensive connectivity options
› For optimizing automation processes
› Built-to-order systems with easy plug-and-play installation
› Available with AC or DC power supply

1U LEOPARD series

Siemens Certified Edge Solutions

NOVAKON
HMI — Your Intelligent IIoT Gateway Solutions

Discover the powerful Siemens Certified Industrial Edge devices, the perfect solution for modern industrial applications.

The Siemens Certified Edge panel PCs offer a groundbreaking approach to digitalizing and optimizing production processes. These edge computing solutions are designed to increase efficiency, reduce downtime, and lower operating costs. With certified compatibility with Siemens Industrial Edge, they provide a robust and reliable solution for Industry 4.0.

The **world's first certified panel PCs** for the Siemens Industrial Edge ecosystem

Benefits of Siemens Industrial Edge

Software
Get ready-made apps or develop your own to enable data-driven decisions and improve your operations.

Devices
We offer a range of devices from which you can choose to implement edge computing in your production environment.
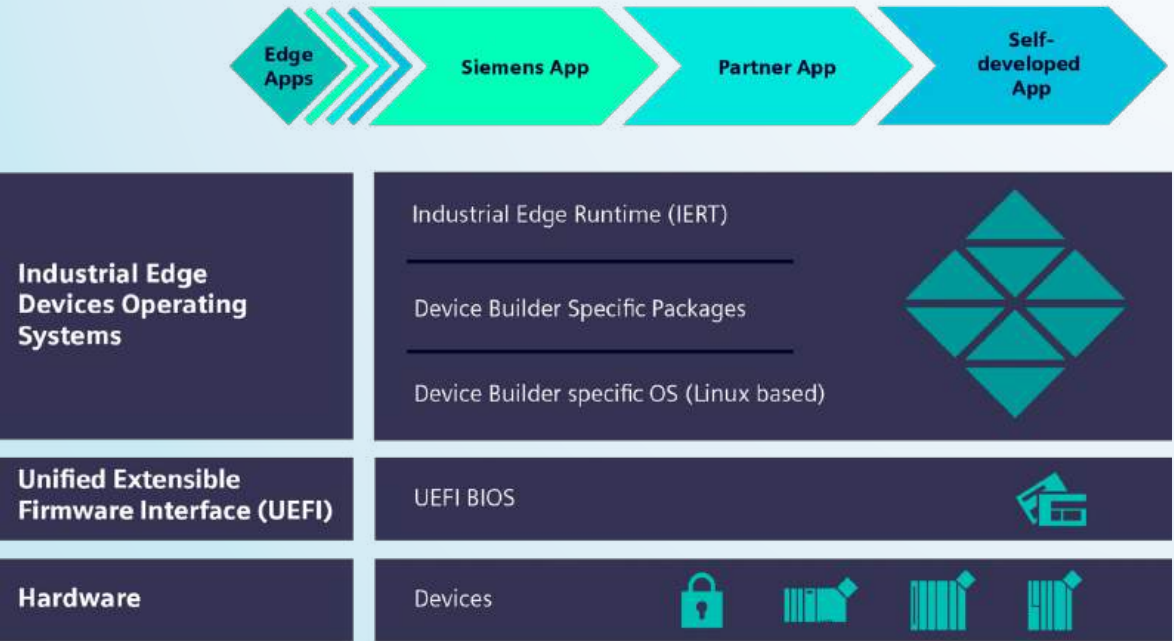
Transparency
Combine your own software and hardware with ecosystem and open source offerings to create the right solution for you.

Community
Join our growing community of Industrial Edge users and providers.

Siemens Industrial Edge Architecture

Edge Apps → Siemens App → Partner App → Self-developed App

Industrial Edge Devices Operating Systems	Industrial Edge Runtime (IERT)
	Device Builder Specific Packages
	Device Builder specific OS (Linux based)
Unified Extensible Firmware Interface (UEFI)	UEFI BIOS
Hardware	Devices

NPP-215P01 & NPP-156P01

Siemens Certified Industrial Edge panel PCs for industrial automation

› 21.5" or 15.6" PCAP multi-touch screens with 1920×1080 Full HD resolution
› Intel® Celeron® J6412 processor
› 2x DDR4-3200 MHz SODIMM, up to 32GB
› IP66 aluminum front panel
› 7H hardened glass

BRESSNER
A ONE STOP SYSTEMS COMPANY

Powered by Siemens Industrial Edge

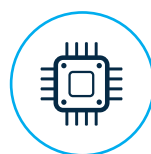Machine Control   Automation   Manufacturing Grounds   Logistics

Industrial Panel PCs

Custom configuration
› Additional / modified I/Os
› Customizable housing
› Extended temperature range

State-of-the-art technologies
› Next Gen CPUs
› Windows 11 Ready
› Cutting-edge chassis for various applications

Premium service packages
› Extended warranty
› Qualified phone support
› Priority queue for faster processing

Fanless Systems for Demanding Continuous Operation

Panel PCs with Aluminium Chassis
For VESA / mounting arm installation

Comprehensive display sizes available from 5.7 to 65 inches

High-resolution displays with high brightness option

Front-facing IP65 rating against dust and water splashes

Various touchscreen options available: PCAP multi-touch, resistive, or infrared

Windows 11 READY

intel iRISxe GRAPHICS

TOUCAN PRO II series

Panel PCs with Stainless Steel Chassis
Water and dust-proof systems up to IP69K

15.6 to 65 inch displays, operable even with latex gloves

Food-grade stainless steel chassis: SUS-304 standard compliance (optional SUS-316)

Optional up to IP69K (withstanding high-pressure or steam jet cleaning)

Protected M12 connectors on the rear I/O panel

Windows 11 READY

ORCA PRO series

Machine control   Kiosk systems   Industrial automation   POS systems

Food processing   Chemical laboratories   Industrial automation   Medical computing

Panel Mount Panel PCs
Fanless built-in touch systems

- Wide range of display sizes available from 10.1 to 24 inches available
- Recessed mounting for precise installation in control cabinets or equipment
- Front-facing IP65 / IP66 rating (optional Marine certification)
- Various touchscreen options available: PCAP multi-touch, resistive, or infrared

Windows 11 READY

EAGLE series

Industrial Touch Displays

Touch Displays with Aluminium or Stainless Steel Chassis
Touch systems for VESA / mounting arm installation

- › Various use cases in industrial automation, food processing and chemical industries, as well as HMI devices
- › Stainless steel versions with high corrosion resistance
- › Up to max. IP69K rating as well as marine or ATEX certifications
- › Available with resistive, infrared, or PCAP multi-touch

- Wide range of display sizes available from 6.5 to 65 inches

ORCA MAX series

High-End Built-In Systems for Control Cabinets

Panel Mount Touch Displays
Touch monitors for recessed mounting

- › Installation on control cabinets or rear screw mounting for a clean finish
- › Available with resistive, infrared, or PCAP multi-touch
- › Full or front IP66 / IP65 rating
- › Screen resolutions up to a maximum of 1,920 x 1,080

- Wide range of display sizes available from 5.7 to 32 inches

PARROT PM series

Open Frame Touch Displays
Custom touch solutions with open frame design

- › Open-frame structure without enclosure for easy adjustment to existing systems
- › Monitor control behind the installation wall
- › Easy integration into applications with limited space
- › With resistive, infrared, or PCAP multi-touch (option without touch)

- Wide range of display sizes available from 5.7 to 42 inches

Open frame displays

Rugged Tablets & Handhelds

We are your reliable expert when it comes to mobile computers such as rugged tablets or industrial handhelds. These mobile devices have been specifically designed for use in harsh environments, such as warehouse and transportation logistics, industrial automation, or field operations.

Various display sizes available:
6.0, 8.0, 10.1 and 12.2 inches

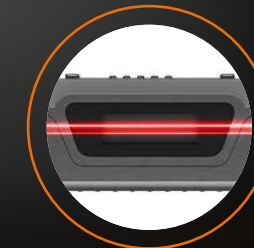At least IP65 rating and MIL-STD-810G certification (hard rubber casing)

Modern 1D/2D Scanners for Warehouse Logistics

1D/2D barcode reader included

SCORPION 12 PRO

SCORPION 6X V2 (Windows / Android)

SCORPION 10 / 12 PRO (Windows / Android)
High-end rugged tablet with hot-swap battery

› Display Size: 10.1" (25.65cm) / 12.2" (30.98cm)
› Resolution: 1,920 x 1,200
› CPU: Intel® Core™ i5-1235U Deca-Core
› Touchscreen: 10-point PCAP multi-touch
› IP Rating + Certification: Full IP65 + MIL-STD-810G
› Operating Temperature: -20° to 60°C

1x Built-in 700mAh / 7.4V battery
1x Hot swap 6,300mAh / 7.4V battery

SCORPION 8X V2 (Windows / Android)
Compact design rugged tablet for outdoor use

› Display Size: 8.0" (20.32cm)
› High Brightness Display: 700 nits
› CPU: Intel® Celeron® N5100 Quad-Core
› IP Rating + Certification: Full IP65 + MIL-STD-810G
› Operating Temperature: -20° to 60°C

Accessories for Tablets and Handhelds

Office dockings

Spare batteries

RAM mounts

Vehicle mounts for cars and forklifts

SCORPION 10X V2 (Windows / Android)
Rugged tablet with high brightness display

› Display Size: 10.1" (25.65cm)
› Resolution: 1,280 x 800
› CPU: Intel® Celeron® N5100 or MTK MT 6789
› Touchscreen: 10-point PCAP multi-touch
› IP Rating + Certification: Full IP65 + MIL-STD-810G
› Operating Temperature: -20° to 60°C

High luminance (700 nits) for optimal readability in direct sunlight

Touch pens

Docking keyboards

Power supplies and cables

Industrial Flash Storage

Thermal
We are capable of optimizing firmware and hardware for temperature, cross-temperature, and airflow, thus validating them for a variety of host environments.

Endurance
We have extensive experience with custom configurations for various workloads. Our solutions offer the best compromise in terms of cost per GB, DWPD, and performance.

Security
We provide a wide range of optional adaptable security features, thereby safeguarding your data during transfer as well as long-term archival.

Longevity
We offer long product life cycles with a 5-year roadmap and support legacy flash products as well as a fixed BOM. Furthermore, we guarantee consistent availability and quality.

For the toughest conditions at the edge

Industrial SSDs
Best performance for critical applications

› High-performance flash storage for mission-critical areas
› Various form factors available: U.2, 2.5", M.2, mSATA, eUSB, or as an USB stick
› Custom options available
› Flash storage and controllers available in one package (e.MMC and NVMe HSBGA SSD)
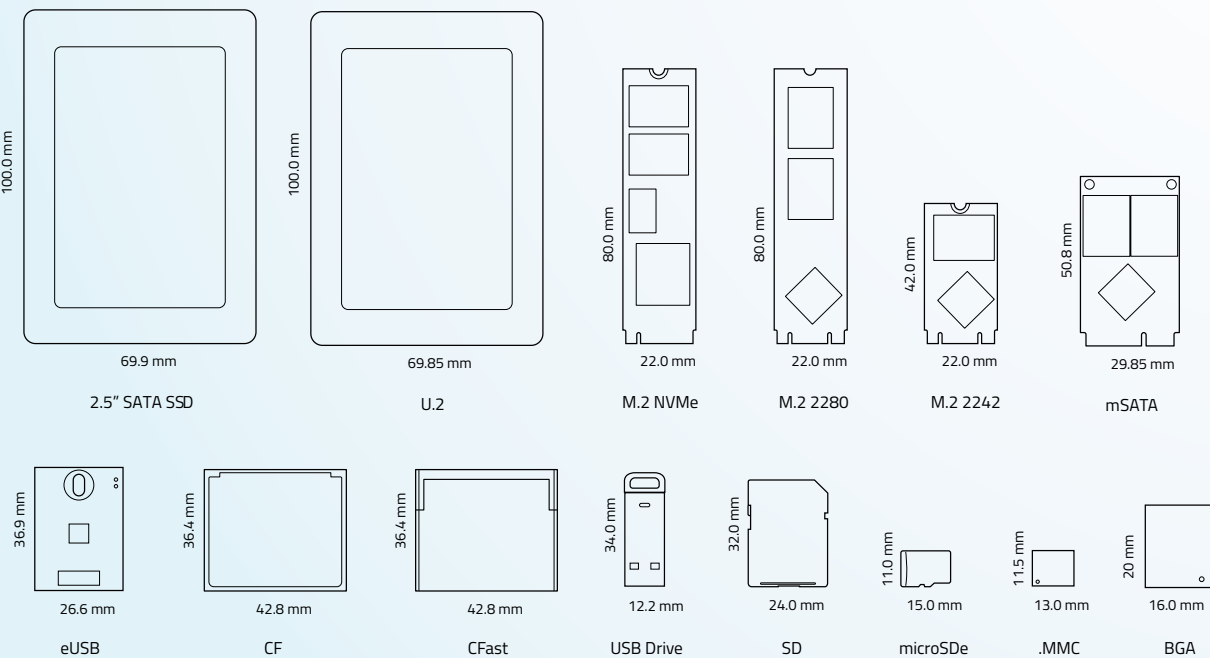
- AutoRefresh - Error bit monitoring
- Hardware-based power failure protection
- Dynamic Data Refresh

Form Factors

Form Factor	Dimensions
2.5" SATA SSD	100.0 mm × 69.9 mm
U.2	100.0 mm × 69.85 mm
M.2 NVMe	80.0 mm × 22.0 mm
M.2 2280	80.0 mm × 22.0 mm
M.2 2242	42.0 mm × 22.0 mm
mSATA	50.8 mm × 29.85 mm
eUSB	36.9 mm × 26.6 mm
CF	36.4 mm × 42.8 mm
CFast	36.4 mm × 42.8 mm
USB Drive	34.0 mm × 12.2 mm
SD	32.0 mm × 24.0 mm
microSDe	11.0 mm × 15.0 mm
.MMC	11.5 mm × 13.0 mm
BGA	20 mm × 16.0 mm

Industrial Memory Cards
High durability and reliable flash storage

› High reliability and data quality even at high storage capacities
› Available in various form factors: SD, MicroSD, PCIe Gen 4 NVMe CFExpress, CFast, and CompactFlash
› Specifically designed for applications such as automotive, automation, networking, or healthcare

- Comprehensive life-time monitoring functionalities
- Advanced Wear Leveling

Cellular Routers

Our Digi 4G LTE and 5G mobile solutions form the backbone of communication in three main categories: Enterprise, Industry, and Transportation / Mobility. They reliably and securely connect people, machines, and data, regardless of location and time. Our cellular routers are fully integrated solutions designed to meet the most demanding requirements. They offer rapid deployment, secure edge computing capabilities, and robust connections. Additionally, they enable monitoring, troubleshooting, and out-of-band management.

Resilience
› Dual SIM slots
› Digi SureLink® for a stable connection
› Advanced routing protocols for network failover

Security
› Digi TrustFence®
› Enterprise-level authentification and encryption

Programming
› Python scripts
› Linux shell scripts
› Compilation of your own code possible

Transportation Routers
› Specifically designed 5G / LTE routers for the transport sector
› Onboard routing, GPS, security, and passenger Wi-Fi
› Dual 600MB/s CAT 11 cellular modules integrated
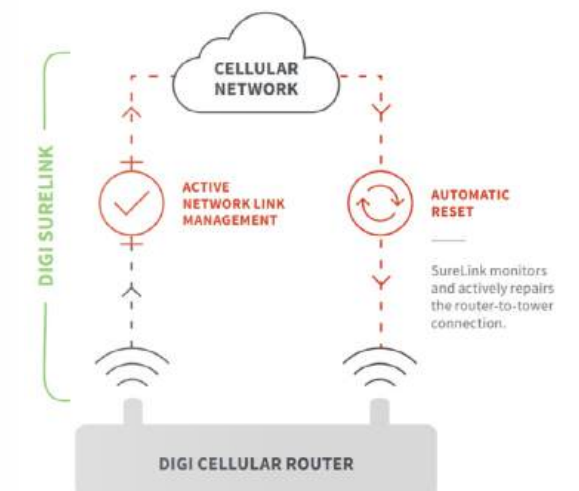› Remote management and fast firmware updates

Digi TX40 5G

Industrial Routers
› 5G edge computing solutions for critical applications
› Reliable network connectivity and remote management
› For precision agriculture, oil fields, industrial tanks, water treatment, and construction

Digi IX40 5G

Enterprise Routers
› Enterprise-level routers for mission-critical deployments
› Mobile network extenders with features such as Gigabit Ethernet, dedicated serial ports, Digi SureLink®, failover, and redundancy

Digi EX50 5G

Software, Tools & Services for IoT Devices

Digi Remote Manager®
Browser-based remote monitoring and control of connected IoT devices

› Industry-leading cloud and edge tools for rapid device deployment and easier facility management
› Bulk management and remote updates of data, firmware, and configurations
› Integration of device data via open APIs for full control with third-party applications
› Real-time alerts and detailed reports on network status and conditions

Digi SureLink®
For maintaining a persistent network connection

› Maximizing mobile network uptime
› User-configurable control
› Ensuring continuous PPP connection
› Keep-alive notifications
› Continuous monitoring of connection integrity, e.g., ping, TCP connection, and DNS lookup

Digi TrustFence™ Security
Easy integration of device security, identity, and privacy features

› Validation of programs and code from approved sources or manufacturers before booting
› Access control for internal and external I/O ports to prevent unwanted local intrusion
› Network authentication options
› New encryption protocols for data transfer

Embedded Solutions

DIGI

Go to Market Smarter, Get to Market Faster

Digi ConnectCore®

Complete ecosystem of embedded solutions for OEMs and developers

› Industry-grade modules with a minimum availability of 10 years
› Suitable for harsh outdoor environments
› System-on-modules including a full suite of developer tools, Yocto and Android support
› Integration of cloud services such as Azure and AWS

Development Kits

Boards, modules, and accessories e.g. dual-band antennas, power supplies, and reference designs

› For rapid prototyping, testing, and developing wireless applications
› Wireless connectivity up to dual-band Wi-Fi 6 802.11ax and Bluetooth 5.3
› Supports Digi Embedded Yocto Linux
› Industrial temperature range: -40° ~ 85°C

Gateways

Gateways, modems, and adapters for converting wireless protocols

› Supporting Zigbee, DigiMesh®, or LoRaWAN
› Connecting various network protocols to IP or cellular networks
› Data aggregation, analog-to-digital conversion, and encryption possible

Digi IX15 IoT Gateway

Digi XBee® Wireless Modules

Comprehensive family of cellular modems and RF modules

› Three programmable form factors
› Various wireless protocols for IIoT applications
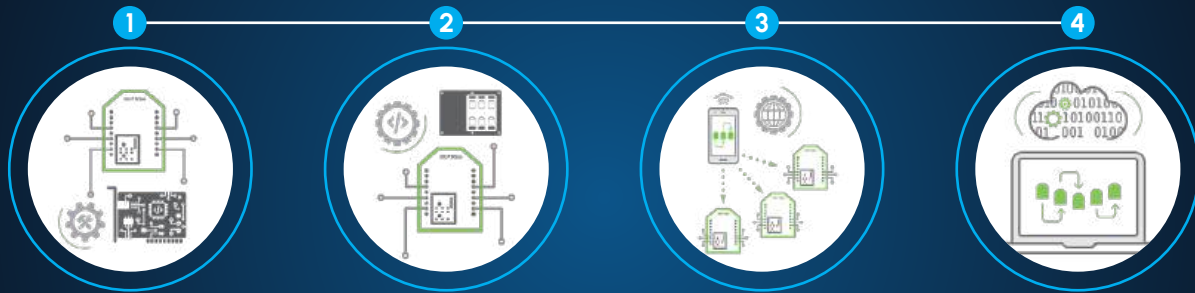› Includes modules, code libraries, tool suite Digi XBee® Tools, and Digi Remote Manager®

Bluetooth™   **Wi Fi™**   **zigbee**   **802.15.4**

LTE Cat-1 LTE-M NB-IoT   **DigiMesh®**   **868MHz**   **900MHz**

Software & Services

Digi XBee® tools with complete lifecycle management

1 — **2** — **3** — **4**

IIoT tools for coding, configuration, and testing

Program up to 6 XBee® devices simultaneously

Deployment, testing, and troubleshooting during installation

Management and monitoring with DRM

Microcontroller Unit (MCU)

ABOV SEMICONDUCTOR

Microcontroller Units (MCUs) are the core of modern electronic solutions, enabling innovative applications across various industries. With a wide range of 8- and 32-bit options, energy-efficient low-power MCUs with sleep mode, and flexible flash and RAM capacities, they provide the perfect foundation for your project.
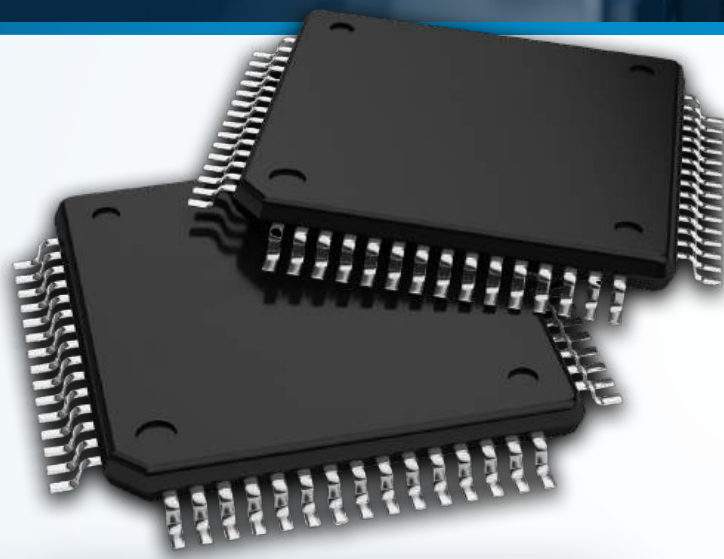
Whether for IoT devices, industrial automation, or wearable technology, ABOV's high-quality MCUs from South Korea offer a reliable alternative to standard solutions from China. With available development kits, developers can quickly and efficiently bring their ideas to life. Rely on proven Korean technology for future-proof electronic solutions, independent of geopolitical risks.

MCU Premium Quality
Made in South Korea

32-Bit MCUs
Ideal for large and small home appliances

› Based on ARM® Cortex®-M processors
› **G1, G2, G3 series:** Comprehensive features including display control, touch sensing, motor control, and USB support
› **G5 series:** Main controller unit for smart home applications
› **L1 / L2 series:** Low-power microcontrollers for energy-efficient embedded systems
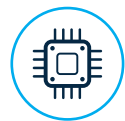› **M series:** Designed for high-performance industrial and automotive applications

8-Bit MCUs
Excellent choice for consumer electronics

› Based on M8051 cores up to a maximum of 16MHz
› **G1 series:** Wide voltage input up to 5.5V, scalable memory up to 128KB, and operating temperatures from -40°C to 105°C
› **R series:** Designed for general LCD functions
› **L series:** Low-power microcontrollers with IAP function and additional flash memory
› **MC series:** CMOS 8-bit controllers with up to 128KB flash memory, offering cost efficiency for consumer electronics and smart home devices

Scaleability

› Arm® Cortex®-M Core processors
› Wide voltage input up to 5.5V
› Optimized solutions for home applications

Simplicity

› IDEs (Debugger and Compiler) / KEIL, IAR
› Code generation
› A-Link, gang programming for mass production

Reliability

› Field-tested EMC/ESD design technology
› Ensured noise immunity

Security

› Protecting your data
› Memory and debug port protection
› Device verification / AES encryption and CRC
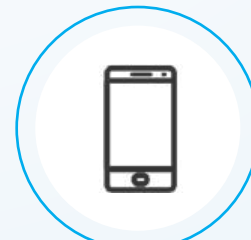
Applications

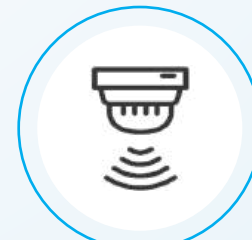Large Home Appliances

Small Home Appliances

Power Solutions

AI Voice Assistants

Smartphones

Smoke Detectors

Smart Home Devices

Remote Controls

Infrastructure Management

Our partnership with Digi enables us to offer a comprehensive range of tailored products and solutions for infrastructure management. These solutions are designed to maximize uptime and optimize the performance of network devices. Our customized solutions meet the demanding requirements of device management, monitoring, and control, allowing you to manage your network effectively and efficiently. Enhance the performance and reliability of your infrastructure with our high-quality devices.

Console Servers

› Secure and intelligent access to network devices such as routers, switches, power controllers, and storage
› Manage and configure up to 48 different network devices via RS-232 (RJ-45 port) using Digi Remote Manager®

Serial Connectivity

› Terminal servers and serial servers for network-critical IIoT devices with serial-to-Ethernet options
› Available in 32-, 16-, 8-, 4-, 2-, and 1-port models
› Connection via RealPort® driver, TCP, or UDP socket

USB Connectivity

› USB-over-IP hubs suitable for up to 24 peripheral devices
› USB-to-Serial converters, Hubport-powered USBs, and remote display connections available
› Various OS support

Medical Terminal Servers

› Patented RealPort® Redirector technology for seamless connection between host and serial device
› Up to eight galvanically-isolated serial ports
› Medical IEC-60601 3rd Edition certification

Ethernet Switches

Our Ethernet switches are ideal for applications requiring high bandwidth and field communication. They provide excellent EFT and ESD protection, even with irregular voltage inputs. The devices are particularly reliable due to the power redundancy feature achieved by a dual power input with reverse polarity protection.

Unmanaged

› Plug-and-play switches without remote configuration, management, or monitoring options
› Unmanaged 10-Gigabit, Gigabit, or 10/100TX multi-port switches (PoE optional)

Managed

› Remote access for configuration, management, and monitoring of a local network
› Fail-safe redundancy option
› Control of user access rights

Power-over-Ethernet

› Provision of power and data for IP phones, surveillance cameras, access controls, Wi-Fi access points, and smart lighting systems
› IEEE standards 802.af (PoE) / 802.3at (PoE+)

Media Converters

› Copper-to-fiber, multi-mode to multi-mode, and single-mode converters
› Resistant to extreme temperatures, shocks, vibrations, voltage spikes, and electromagnetic interferences

BRESSNER
A ONE STOP SYSTEMS COMPANY

Over 30 Years of
Excellence

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