STEALTH
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Rugged Little PC / Mini PC Buyer's Guide

How to choose the right Industrial PC for your Application

Selecting a **rugged mini PC** for mission-critical applications requires balancing **Performance, Reliability, and Durability** in harsh environments like factory floors, military vehicles, marine vessels, or remote substations. These systems must withstand **extreme conditions while meeting industry standards** such as **EN50155/21 (Railway and Transportation), MIL-STD (obustness & security in extremely rugged applications such as Defense), IEC-60950 (Electrical product safety) and EMC/EMI (Navigation and communication)** to ensure uptime and avoid costly failures.

Key features to consider when choosing a rugged PC:

- **Graphic Processing Power**
- **Temperature Range**
- **I/O Ports**
- **IP Rating**
- **Form Factor**
- **Mounting Options**
- **Certifications**
- **DC Voltage Range**
- **Cooling Options**

With 35+ years of experience, Stealth delivers ultra-rugged computing solutions with global reliability, extended product roadmaps, and long-term legacy support.

LPC-400 Series – High-Performance Rugged Mini PCs

The LPC-400 Series delivers reliable computing power in a compact, rugged footprint—ideal for control systems where space is limited but performance and long-term stability are essential. Built with 8th Gen Intel® Core™ and Celeron® processors and equipped with essential industrial I/O, it balances modern performance with legacy compatibility. This cost effective fanless system integrates easily into embedded applications and supports both new deployments and upgrades to existing infrastructure.

Key Features

- **8th Gen Intel® Core™ Processors:** Delivers desktop-level performance for control applications
- **Legacy I/O Support:** Includes COM, PS/2, and multiple GbE ports for seamless integration
- **Flexible Storage Options:** Supports up to 3 SSDs including removable bays for RAID or hot-swap use and legacy I/O, the LPC-400 Series is your go-to.

LPC-800 Series – Scalable, Modular, and Built for the Edge

The LPC-800 Series is Stealth's most adaptable line—built from the ground up to thrive in mission-critical edge environments. It supports a wide range of Intel® processors, from power-efficient Atom® for low-power gateways to 10th/11th Gen Intel® Core™, Atom® and Xeon® CPUs for high-performance workloads. With its modular expansion slots, wide temperature variants, and rugged, fanless construction, the LPC-800 Series brings dependable flexibility to transportation systems, industrial automation, and field deployments alike.

Key Features

- **Wide Temperature Support:** Operates from -40°C to 70°C in select models, ideal for field use
- **Modular Expansion:** Supports PCIe/PCI, mini PCIe, and universal I/O bay kits
- **CAN Bus and Power Ignition:** Intelligent ignition control protects data and ensures stable performance by managing power during vehicle ignition cycles.

LPC-900 Series – Advanced Graphics and High Performance AI/Edge Workloads

The LPC-900 Series is Stealth's most powerful edge computing platform to date—purpose-built for workloads that demand extreme graphics, intensive I/O, and reliable performance in unforgiving environments. With integrated GPU acceleration and high-core CPUs, it's engineered for AI inference, video analytics, and multi-display control. Whether powering vision systems in transit infrastructure or driving compute-heavy applications in defense and research, the LPC-900 Series brings together high-end processing with industrial-grade resilience. Rugged, fanless, and EN50155/21 certified, it's ready for deployment in transportation networks, mobile command centers, and anywhere else reliability meets performance at the edge.

Key Features

- **NVIDIA® GPU Support:** Drive up to 7 displays and accelerate AI workloads at the edge
- **Railway Certifications:** EN50155/EN50121 compliance for transportation and rolling stock
- **Dual Hot-Swap SSD Bays:** Designed for 24/7 uptime with front-access storage and RAID support certifications. (Optional up to 2x SSDs or 4X M.2 Gen 4 NVME Drives).

Product Comparison Table

Feature	LPC-400 Series	LPC-800 Series	LPC-900 Series
Best For	Compact control, legacy I/O	Modular industrial & edge deployments	AI, video analytics, visualization
CPU Options	8th Gen Intel® Core (up to i7-8700T)	Atom®, Celeron®, Core™, Xeon® (mobile)	Core Ultra™, Xeon® w/ NVIDIA® GPU support
Max Memory	64 GB DDR4	64 GB DDR4 (ECC optional	Up to 96 GB DDR4/DDR5 (Optional ECC)
Storage Options	Up to 3x SSD Slots	Up to 3x SSD Slots	Up to 2x SSDs /4x Gen 4 M.2 NVME SSD
Display Outputs	2 (DVI + DP)	Up to 3 (DVI + 2x DP)	Up to 7 (4x GPU + 3x onboard)
Networking	Up to 4x GbE	2x GbE + Optional 10Gb LAN, POE+, USB 3.0, 5G	2x GbE + 3x SIM (4G/5G ready)
Expansion Options	Up to 2x mPCIe + 4x PCIe (Legacy Support : 1x 32 bit PCI 2.3,33 MHz up to 8.5")	Mini PCIe, PCIe/PCI slots	PCIe x4 GPU slot Optional PCIe/Mini PCIe, 2X M.2 Gen 4 Key B/Key M
Power Input	9-48V DC	9-48V DC	Up to 9-55V DC
Operating Temperature	0°C to 40°C	-40°C to 70°C (wide-temp models)	-40°C to 70°C (optional)
Certifications	CE, FCC, RoHS, TAA	CE, FCC, RoHS, UL, TAA	CE, FCC, RoHS, EN50155/ EN50121 (rail certified)
Form Factor	Compact (panel-mountable)	Compact to Mid Size with Expansion	Ultra Compact to Mid Size

Built for Your Industry. Ready for Any Challenge.

Defense & Government

These sectors require long lifecycle support, high reliability, and compliance with strict procurement and security standards.

- **LPC-400 Series:** Ideal for legacy system integration with PS/2, serial, and PCI and PCIe support. Its TAA compliance makes it procurement-friendly for government contracts.
- **LPC-900 Series:** Offers GPU acceleration and multi-display output, making it well-suited for UAV vision systems, training simulators, and other high-performance visual tasks.
- **LPC-800 Series:** Fanless and rugged, with wide input power support and expansion options, perfect for mobile command centers and vehicle-based deployments.

Transportation / Marine

Rail and marine environments demand certified hardware, resistance to vibration, and wide power input ranges.

- **LPC-900 Series:** Fully certified to EN50155/21 standards, supports 10–36 VDC input, ignition sensing, and multiple LAN/SIM ports, making it ideal for rail, onboard, and signage applications.
- **LPC-800 Series:** Models like the 875 support -40 °C operation and ignition sensing, suitable for in-vehicle use and Edge IOT applications in extreme conditions

Utilities / Energy

Power and utility sites often face harsh environmental conditions and require legacy connectivity.

- **LPC-800 Series:** Fanless, wide-temp models perform reliably in dusty, humid environments, with multiple Ethernet and serial/CAN ports for legacy devices.
- **LPC-400 Series:** Panel-mount variants are a strong choice for SCADA systems and control panels, combining ruggedness with real-time communication capabilities.

Industrial Automation / Manufacturing

These settings require real-time control, modular I/O, and resistance to vibration and electrical interference.

- **LPC-400 Series:** With 4× GbE, optional CAN bus, and serial support, it's a solid platform for HMI, PLC, and motion control.
- **LPC-800 Series:** Its flexible expansion (PCI, digital I/O), IP65 panel-mount options, and rugged construction make it a versatile automation controller.

Scientific Research

Labs and research facilities need reliable high-performance systems for data collection, simulation, and AI inference.

- **LPC-400 Series:** A reliable balance of performance and efficiency, suited for semi-rugged indoor environments where low power and dependable operation are essential.
- **LPC-800 Series:** Ideal for CPU-intensive tasks with Xeon/i7 options, ECC memory support, and Linux/Windows compatibility.
- **LPC-900 Series:** Supports GPU-accelerated workloads and up to 8K graphics, making it perfect for visualization, imaging, or deep learning tasks.

Across industries, Stealth's configurator and support ease integration: **engineers can choose the exact LPC model and options (CPU, RAM, storage, I/O modules) online, then request a quote or demo.** Stealth offers guided assistance and custom configuration: contact the sales team or request a quote through stealth.com to configure an LPC system to your needs. **Stealth's rugged mini PCs are backed by comprehensive documentation, 3 year warranty and responsive support, ensuring that your mission-critical deployment is delivered on time.**

Ready to Take the Next Step?

Once you've found the right LPC model, visit our **Online Store** to explore the series and select your ideal configuration.

Configure and Get a Free Quote:
Customize your system by choosing CPU, RAM, storage, power input, and I/O options.
Click "Get a Quote" to receive pricing for your configuration.

Access Technical Resources:
Click here to download datasheets, mechanical drawings, and certifications to support your planning.

Talk to a Stealth Specialist:
Our team is ready to help with product recommendations, demos, and custom requests.
Contact us to get started.