

# 2024 **Product Solution Guide**



Parhelia B.V. www.parheliabv.com (1)+31(0)10 741 00 28



DARVEEN



All product specifications are subject to change without notice.

# **Our Capabilities**



**Optimize Productivity Across Industries with** Darveen's **Industrial Computers** 





# We Are Darveen

Established in 2007, Darveen has been dedicated to developing rugged industrial computer solutions tailored to the unique needs of various vertical industries. Our product lines include in-vehicle computers, industrial panel PCs, rugged tablets, embedded box computers, and industrial monitors. Darveen's vehicle-mounted computer solutions have successfully helped hundreds of container terminals in streamlining their processes and operations. With nearly 20 years of experience in product design and manufacturing, Darveen's products have gained widespread acceptance in diverse markets, including container terminals, warehousing, manufacturing, industrial equipment, mining, and special vehicle fleets.

# **Product Development and Testing**

We uphold a rigorous control process throughout the development and verification phases, from EVT/DVT/PVT to MVT. We improve testing indicators at every stage, supported by an excellent testing lab equipped with IPX6 water-proof testing devices, high and low temperature testing boxes, constant temperature and humidity testing boxes, burn-in testing boxes, high frequency 3-axis electromagnetic vibration machines, salt spray cabinets, sand-dust testing chambers, drop testing machines, and other advanced equipment. Our commitment extends to providing industry certifications, such as CE/FCC/CCC and US Military Standard, tailored to our client's needs, making Darveen a quality-driven choice for industrial solutions.

# **Expertise in Manufacturing**

With four production lines adhering to standard SOPs, our staff works diligently to maintain consistent quality. Our MES system ensures product traceability, and we perform quality control at every stage of the manufacturing process, from IQC, IPQC, FQC to OQC. Our manufacturing and engineering facilities are certified to the latest ISO-9001, ISO-14001 and ISO-45001 standards. Our greatest advantage in manufacturing lies in the extensive production capacity and significant flexibility of our Shenzhen Manufacturing Center, allowing us to promptly meet customer delivery demands.

# **Recognition and Innovation**

We are a recognized "National Hi-Tech Enterprise", known for innovation, holding more than 100 patents affirming dedication to creativity and independent Research and Development. We offer pioneering solutions in top-notch industrial computing, backed by extensive industry experience.

# **Our Commitment to the Environment**

Our environmental policy is executed in the design and production process, where we strive to reduce damage to the environment by recycling manufacturing materials. Our products are compliant with RoHS and REACH standards. This means we take all reasonable measures to ensure that our products and those of our suppliers are compliant with these directives.









# Darveen's Solutions and Applications Table

# Vehicle Mount Computers

	VT Series	FMT Series	MVT Series
Ports	•	•	
Warehouse	•		
Transportation and Logistics		•	
Mining		•	
Agriculture		•	
Railway			•

# Industrial Panel Computers

		DPC Series	APC Series	SPC Series	<b>RPC Series</b>
	Manufacturing	•	•	•	•
	Warehouse	•	•		
-5 -2	Kiosk and Retail	•	•		
Ē	Energy	•	•		
	Surveillance	•	•		

# **Embedded Box Computers**

		MBC Series	<b>MIC</b> Series	VBC Series	NBC Series	AEC Series
	Manufacturing	•	•	•	•	•
	Warehouse	•	•	•	•	•
-13 -17	Kiosk and Retail	•	•		•	•
	Surveillance	•	•	•		
Ē	Energy	•	•		•	•

# Industrial Computers

		DMB Series
	Manufacturing	•
	Surveillance	•
Ē	Energy	•

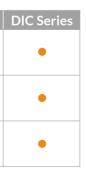
# In-vehicle Box Computers

	VC Series	MVC Series
Transportation and Log	gistics •	•

# **Rugged Tablets**

		RTC Series
	Manufacturing	•
	Warehouse	•
	Transportation and Logistics	•
	Field Services	•
	Public Sector	•
	Agriculture	•
Ē	Energy	•





# **Ports and Terminals**

# Warehouse Forklifts

Due to the prevalence of e-commerce and the post-pandemic recovery, the management of port terminals at global ports has become increasingly complex. This has led to a growing number of port operators seeking reliable and robust IT solutions. Whether it involves gantry cranes, quay cranes, yard cranes, reach stackers, forklift trucks, or container trucks responsible for transporting goods, there is a critical need to effectively monitor mobile machinery, assets, and human resources. Darveen offers rugged computing solutions with timely and stable data transfer to enhance the efficiency of container handling and cargo movement. Darveen's optimized rugged computers facilitate the deployment of port automation.

### **Darveen's Solutions & Advantages**

### • A comprehensive selection of products

Darveen's VT series of vehicle mount computers offer 7 to 12.1 inches, x86 or ARM CPUs, supporting Windows and Android OS. The rugged tablet RTC series provides 8 to 10.1-inch options.

### • Rugged to withstand harsh environment

The VT series features an aluminum alloy case for anti-corrosion and exceptional durability against salt and fog. It complies with IP65 and MIL-STD-810G standards, while RTC tablet is IP67-rated and MIL-STD-810H compliant.

### Seamless wireless connectivity

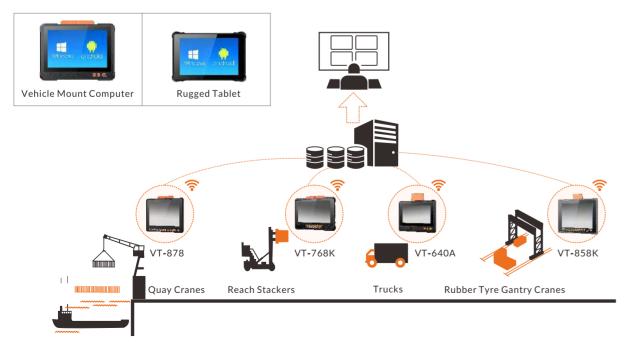
Both the VT and RTC series offer various wireless connectivity options, including Wi-Fi, Bluetooth, 4G or 5G, and GNSS.

#### • Wide input voltage and power ignition

The VT series offers a standard 8 to 36 VDC (optional 18 to 72 VDC) wide input voltage and power management with ignition control.

#### • Versatile mounting brackets and accessories

The VT series comes with different mounting brackets, keyboards, and IP65 M12 connectors. The RTC Android series features a 10,000mAh battery for prolonged usage.



As warehouse intelligence continues to advance, the automation and informatization levels of forklifts in warehouses have also been significantly enhanced. Darveen's VT series of vehicle-mounted computers and RTC series of rugged tablets, equipped with rich I/O interfaces and data collection functions, cater to the operational needs of warehouses-from picking and receiving to inventory management. Through advanced wireless technology, they offer faster and more stable data transmission, providing more accurate and real-time data support for intelligent warehouse management.

### **Darveen's Solutions & Advantages**

#### • Tough and durable

Darveen's VT series and RTC series comply with US military MIL-STD-810G/IP65 and MIL-STD-810H/IP67 respectively and can withstand long-term vehicle vibration operations.

 Real-time transmission of data and location Both the VT and RTC series offer various wireless connectivity options, including Wi-Fi, Bluetooth, 4G or 5G, and GNSS.

### Multiple I/O and versatile functions

In addition to built-in I/O interfaces (USB, COM, LAN, CAN bus), the VT series can also be expanded with M12 connectors. The RTC series supports 2D barcode reading, NFC, RFID, fingerprint (optional).

### • Versatile mounting brackets and accessories

The VT series comes with different mounting brackets, keyboards, and IP65 M12 connectors. The RTC Android series features a 10,000mAh battery for prolonged usage.











Warehouse Inventory Tracking Software

# Intelligent **Fleet Management**

# **Mining Vehicles**

Currently, freight logistics face many challenges, including rising fuel prices and emission pollution. To achieve optimal fleet management, it is essential to apply vehicle telematics technology in fleet management. This involves integrating technologies such as Wi-Fi, 4G/5G, the Internet of Things, edge computing, and smart sensors to facilitate the collection of data such as vehicle location and fuel consumption. Connected fleet management can assist fleet managers, logistics operators, and drivers by providing real-time reports and analyses on route planning, fuel consumption analysis, and vehicle health diagnosis, enabling them to make informed and prompt decisions.

-0-

### **Darveen's Solutions & Advantages**

### • All-in-one and box PC solutions

Darveen offers vehicle mount computers with 7 to 12.1-inch touchscreen interfaces and in-vehicle box computers designed for data collection and control purposes.

• 4G/5G real-time fleet communication and tracking

Darveen's vehicle computers ensure wireless connectivity through 4G/5G SIM cards and Mini PCIe expansion, allowing seamless real-time vehicle tracking with GNSS positioning functions.

### • Wide input voltage and power ignition

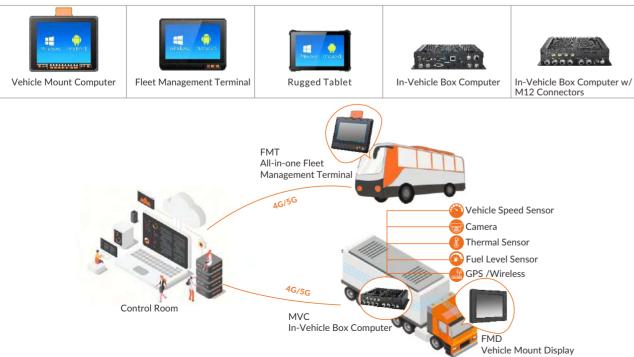
Darveen's vehicle computers offer a standard 8 to 36 VDC wide input voltage and power management with ignition control.

### • Industrial-grade I/O interfaces

The in-vehicle computer product line provides I/O interfaces such as USB, COM, GPIO, and CAN bus to connect peripheral devices. The MVT and MVC series feature rugged M12 connectors.

### Rugged and durable

Darveen's vehicle computers are compliant with the US military standard MIL-STD-810G for shock and vibration. The VT series is also IP65-rated for water and dust resistance.



Digitizing mining is an extremely challenging field. The scope of data management extends from vast expanses covering several kilometers to precision measurements down to centimeters, making data transmission highly complex. Additionally, mining environments are often harsh, with extreme temperatures, high dust levels, and challenging conditions. The shocks and vibrations on the ground add to the challenges, requiring in-vehicle computers used for fleet management to be rugged and durable. Darveen's vehicle mount computers provide precise positioning and data connectivity for mining management and have successfully been deployed in numerous mining sites worldwide.

### **Darveen's Solutions & Advantages**

• Rugged industrial design

The VT and MVT series feature robust aluminum alloy cases for exceptional durability, IP65 sealing, and MIL-STD-810G compliance. Additionally, the MVT series is equipped with higher protection class M12 connectors.

- Real-time transmission of data and location Darveen's vehicle mount computers offer various wireless connectivity options, including Wi-Fi, Bluetooth, 4G or 5G, and GNSS.
- Multiple I/O for peripheral connection

Darveen's vehicle mount computers include I/O interfaces such as USB, COM, LAN, and CAN bus. They can integrate with walkie-talkies to facilitate team communication.

• Wide input voltage and power ignition

The VT, FMT and MVT series offer a standard 8 to 36 VDC (optional 18 to 72 VDC) wide input voltage and power management with ignition control.







# **Field Services**

# **Industrial HMIs**

Darveen's rugged tablet PCs undergo rigorous testing to ensure unparalleled durability and resilience in extreme conditions. Engineered for enhanced productivity, our rugged tablet computers are versatile, providing optimal performance for the mobile workforce. They facilitate instantaneous communication and data exchange between field technicians and back-end operators. With rugged and durable features, they enable field personnel to work easily in harsh environments and extreme weather, enhancing efficiency and providing insights for decision-making.

### **Darveen's Solutions & Advantages**

#### • Rugged product portfolio

The RTC series offer 8- and 10.1-inch options, supporting both Windows and Android operating systems. It complies with IP67 and meets MIL-STD-810H standards.

#### • Reliable, real-time communication

The RTC series supports various wireless connectivity options, including Wi-Fi, Bluetooth, and 4G LTE.

### • Intuitive, accurate data capture

Equipped with a camera, 1D/2D barcode scanning, RFID reading, and fingerprint identification (optional), the RTC series allows field workers to easily document worksite conditions and capture evidence.

### High productivity

The RTC series offers versatile connectivity with USB, USB Type-C, LAN, HDMI, and aviation plug options. It also features a sunlight-readable 700-nit screen for outdoor use.

#### • Accessories and interchangeable battery

Accessories such as an office charging dock, a vehicle mounting dock, and a hand strap are available. The RTC Android series features a 10,000mAh battery for prolonged usage.





Data Collection

As the manufacturing industry transitions towards Industry 4.0 and smart factory transformations, digital machineries have been extensively introduced into shop floors. In factories, each workstation is equipped with an industrial panel computer serving as a Human-Machine Interface (HMI), connected to MES servers via Ethernet. Through these industrial panel computers, operators can promptly receive production instructions, and e-SOPs for individual work orders are displayed on the screen, providing assistance to operators for real-time coordination, quality management, and digital data recording through data collection and monitoring. Darveen's industrial panel PCs effectively achieve optimized management throughout the entire production process, enhancing delivery capabilities and material control. In food processing factories, facing residues and greasy environments, Darveen also offers stainless panel PCs to reduce the corrosion and downtime losses of computers.

### **Darveen's Solutions & Advantages**

Comprehensive HMI selections

Darveen offers industrial panel PCs ranging from 8 to 21.5 inches, with CPU platforms from ARM to Intel Celeron/Core-i CPUs. Users can also choose between Windows or Android OS.

### • User-friendly touch screen

Touch options include an ultra-sensitive multi-point projective capacitive touchscreen (P-CAP) or a single-point resistive touchscreen.

#### Built tough for harsh environments

The entire series is fanless and provides diverse specifications for different environments, including IP65 front panels, full IP65 with M12 connectors, and full IP66 stainless steel with M12.

 Rich I/O connectors for easy connection to factory equipment Available ports include USB, GbE LAN, and COM to connect to factory equipment such as scanners, RFID readers, printers, alarms, and sensors.









# Industrial Automation 🚮

# **IoT Gateways**

The introduction of embedded computers plays a crucial role in modern factory automation. Through the realization of automated production processes, embedded computers not only facilitate efficient communication between machines but also contribute to the achievement of smart factories by enabling machine vision inspection for quality management. These computers collect production data, compute and analyze data to optimize production. They transmit production data to central control rooms via high-speed networks, providing real-time and comprehensive decision-making information for businesses. Darveen's rugged embedded computers and industrial computers endure harsh industrial conditions, performing data collection, monitoring, and predictive maintenance for enhanced production efficiency.

### **Darveen's Solutions & Advantages**

### • Diverse product portfolio

Darveen offers embedded computers and industrial chassis solutions, providing flexible customization and high integration capabilities tailored to customers' applications.

### • Robust build for continuous operation

Key features include a wide temperature range, wide 9-36 VDC input, and optimized heat dissipation. The cableless and fanless design not only enhances reliability but also reduces maintenance and downtime costs.

### • Abundant I/O and flexible expansion

Rich I/O interfaces, such as USB, GbE LAN, COM, PoE, and GPIO, cover a wide range of scenarios in smart factory usage.

### • Highly expandable

The internal Mini PCIe and PCI/PCIe expansion slots are available for wireless communication and additional function expansion, catering to various factory applications.





The IoT Gateway serves as a bridge between IoT devices and the cloud, with the functionality of processing, converting, and managing data. IoT devices or sensors utilize wireless technologies like Zigbee, Bluetooth, Wi-Fi, LTE, etc., for communication with the IoT Gateway. The IoT Gateway aggregates and transmits on-site data to the cloud control center through Wi-Fi or LTE. The applications of the IoT Gateway are ubiquitous, especially in unattended remote areas, spanning industrial fields, energy and utilities, smart buildings, agriculture, and smart cities, among others. It can effectively monitor different aspects, including air quality, smart meters, and security systems. Darveen's compact embedded computer can serve as the hardware platform for the IoT Gateway, enabling a seamless connection from the edge to the cloud.

#### **Darveen's Solutions & Advantages**

### • Flexible small form factor

Darveen's NBC and AEC series are based on ARM and x86-based platforms, featuring a compact design suitable for installation in space-constrained control cabinets.

#### • Efficient and economical

The NBC series is powered by Intel Celeron or Atom CPUs, with a low TDP of 12 Watts or less, while the AEC series utilizes the RockChip ARM-based RK3399/RK3568 processor. Both are ideal for low-power IoT gateway applications.

### • Rugged and wide power design

Darveen's NBC and AEC series operate in a wide temperature range of -10 to 60°C. With 9-36 VDC inputs (optional), they accommodate a wide array of applications.

• Rich connectivity for M2M (machine-to-machine) communication The NBC and AEC are equipped with rich wireless connectivity features such as 5G/4G LTE, Wi-Fi, Bluetooth, and I/O connectivity options such as COM, USB, GbE LAN, DIO, CAN Bus (optional).





Electricity Meter







# **Vehicle Mount Computers**





### **Diverse Product Selections**

Darveen's vehicle mount computers provide a diverse range of options, including screen sizes from 7 to 15 inches, capacitive and resistive touch, and a choice between Windows and Android operating systems. Various CPU options are available, ranging from Intel<sup>®</sup> Celeron<sup>®</sup> and Core<sup>™</sup> i5 to ARM-based processors.



### Advanced Wireless Antennas

Our products come equipped with built-in Wi-Fi, 4G/5G communication modules, and support different positioning options, like GPS, GLONASS, Galileo, and Beidou. This ensures smooth real-time communication for swift order dispatch and tracking individual vehicles from remote locations.



### **Rugged Reliability**

Constructed from die-cast aluminum alloy, the vehicle mount computers provide exceptional durability and corrosion resistance in challenging environments and operate at temperatures -20 to 60°C. With a fanless design for minimal maintenance, the VT and MVT series also feature dust- and water-proof IP65 sealing and meet MIL-STD-810G standards for shock and vibration resistance.



### Adaptable Power Connectivity

To address voltage fluctuations and different vehicle power specifications, our vehicle mount computers incorporate a wide-voltage power input (8 to 36 VDC) and feature ignition control for ensuring power supply stability.

### Windows Vehicle Mount Computers

### VT Series (OS: Windows)

- Intel<sup>®</sup> Core<sup>™</sup> i5 / Celeron<sup>®</sup> processor
- 7" to 15" TFT-LCD with 5-wire resistive or P-Cap touchscreen (400-1,000 nits)
- Available with numeric, function keys, or QWERTY keyboard
- Rugged aluminum enclosure and fanless design
- IP65 protection against water and dust
- Compliant with MIL-STD-810G vibration testing standards
- Wide range 8-36VDC power input with ignition control
- Flexible expansion capability for Wi-Fi 6E, Bluetooth 5.3, LTE, 5G, GPS, CAN2.0B

### Android Vehicle Mount Computers

### VT Series (OS: Android)

- Rockchip RK3399 processor
- 7" to 15" TFT-LCD with P-Cap touchscreen (400-1,000 nits)
- Available with numeric or function keys
- Rugged aluminum enclosure and fanless design
- IP65 protection against water and dust
- Compliant with MIL-STD-810G vibration testing standards
- Wide range 8-36VDC power input with ignition control
- Flexible expansion capability for Wi-Fi 5, Bluetooth 4.2, LTE, 5G, GNSS

### Fleet Management Terminals

### **FMT Series**

- Intel<sup>®</sup> Celeron<sup>®</sup> / Unisoc 8581 / Rockchip RK3568 processor
- 7" to 10.1" TFT-LCD with P-Cap touchscreen
- Rugged metal enclosure and fanless design
- Wide range 8-36VDC power input with ignition control
- Flexible expansion capability for Wi-Fi, Bluetooth, LTE, 5G, GPS, CAN2.0B
- Supports Windows, Linux or Android operating systems

### Vehicle Mount Computers with M12 Connectors

### **MVT** Series

- Intel<sup>®</sup> Core<sup>™</sup> i5 / Celeron<sup>®</sup> / Rockchip RK3399 processor
- 10.1" industrial LCD with P-Cap touchscreen
- M12 connector I/O interfaces
- IP65 protection against water and dust
- Wide range 8-36VDC power input with ignition control
- Optional Wi-Fi, Bluetooth, LTE, 5G, GPS, CAN2.0







# **In-vehicle Box Computers**





#### Seamless Wireless Connectivity

Darveen's in-vehicle box computers come equipped with built-in Wi-Fi, Bluetooth, 4G/5G communication modules, and support different positioning options, like GPS, GLONASS, Galileo, and Beidou. This ensures smooth real-time communication for swift order dispatch and tracking individual vehicles from remote locations.



Rich I/O Interfaces and Rugged M12 Connectors Darveen's in-vehicle box PCs provide diverse I/O interfaces, including standard CAN Bus, enabling the retrieval of data from sensors and offering vehicle health diagnostics and predictive maintenance for fleet management. The MVC series features M12 connectors with vibration resistance, ensuring computing stability during the move.



### **Rugged Reliability**

Darveen's in-vehicle box PCs are designed to withstand the rigorous environmental conditions for both on and off-road vehicle applications. They feature a fanless design, a wide operating temperature range of -30 to 70°C, and comply with MIL-STD-810G standards for shock and vibration resistance.



Adaptable Power Connectivity To address voltage fluctuations and different vehicle power specifications, our in-vehicle pcs incorporate a wide-voltage power input (8 to 36 VDC) and feature ignition control for ensuring power supply stability.

# **In-Vehicle Box Computers**

### VC Series

- Intel<sup>®</sup> Celeron<sup>®</sup> processor
- Rugged aluminum enclosure and fanless design
- Wide range 8-36V DC Power input with ignition control
- Optional for Wi-Fi, Bluetooth, LTE w/ Micro-SIM, GPS, CAN2.0B
- Wide operating temperature range of -30°C to 70°C
- Compliant with MIL-STD-810G vibration testing standards

# In-Vehicle Box Computers with M12 Connectors

### **MVC** Series

- Intel<sup>®</sup> Core<sup>™</sup> i7/i5 / Celeron<sup>®</sup> processor
- Rugged and fanless design with M12 connectors
- Wide range 8-36V DC Power input with ignition control
- Optional support Wi-Fi, Bluetooth, LTE, GPS, CAN2.0, J1708
- Wide operating temperature range of -30°C to 70°C
- Compliant with MIL-STD-810G vibration testing standards





# **Rugged Tablets**





#### Versatile Options

Darveen's rugged tablets are offered in x86 or ARM processors, Windows or Android operating systems, and screen sizes of 8 or 11.6 inches. They also support handwriting input, glove touch, stylus and wet touch modes, catering to various needs.



### **Built to Last**

Our rugged tablets provide stability and reliability to operate effectively in the most challenging environments. They are engineered to withstand extreme temperatures, shocks, vibrations, and drops, compliant with IP67 for water and dust resistance and meet MIL-STD-810H standards.



Seamless Wireless Connectivity The RTC series supports a diverse range of connectivity options, including Wi-Fi, Bluetooth, and 4G LTE. This ensures smooth data transmission and real-time communication with the control center, a crucial capability for field service applications.



**High Productivity** 

The RTC series offers extensive I/O connectivity, including USB, USB Type-C, LAN, COM and aviation plug options, facilitating the connection of diverse peripherals. Additionally, the tablet supports 2D barcode and RFID reading and writing. It features an integrated sunlight-readable screen and removable high-capacity battery.



### **Enhanced Data Security**

The RTC series includes multiple identity verification options for more convenient and secure login, such as fingerprint readers and smart card readers. It also supports logging into tablets based on facial recognition and infrared camera technology.

# Windows Rugged Tablets —

### **RTC Series**

- Intel<sup>®</sup> Core<sup>™</sup> i7/ Core<sup>™</sup> i5 / Celeron<sup>®</sup> processor
- Available with 8, 10.1, and 11.6-inch LED panels, sunlight readable
- Integrated 1D/2D barcode reader, NFC, RFID, fingerprint (optional) for data collection
- Supports 4G, Wi-Fi, Bluetooth, and GNSS
- Rich I/O interfaces, including serial port, RJ45 Ethernet, USB, HDMI
- Removable high-capacity battery design
- Hot-swappable battery (RTC-I116 only)
- IP67 and MIL-STD-810H certified

## Android Rugged Tablets

### **RTC Series**

- MediaTek MT6771 Octa-core processor
- Available with 8 and 10.1-inch LED panels, sunlight readable
- Integrated 1D/2D barcode reader, NFC, RFID, fingerprint (optional) for data collection
- Supports 4G, Wi-Fi, Bluetooth, and GNSS
- Rich I/O interfaces, including serial port, RJ45 Ethernet, USB, HDMI
- Removable high-capacity battery design
- IP67 and MIL-STD-810H certified

### Darveen provides a full suite of accessories that bring ease of use and management.





Long-Lasting Hot-swap Battery For mobile workers, efficient battery management is as crucial as the functionality of the tablet itself. The dual hotswap battery design of RTC-I116 provides sufficient capacity for a full day of work. Additionally, the RTC-I116 supports fast charging through the USB-C interface.





Strap	Shoulder Strap	Carry Bag

# **Industrial Panel Computers**





**Full Selections and Various Functionalities** Darveen's industrial panel computers comprise four series: the Windows DPC Series and the Android APC Series for general industrial environments, the SPC Series designed for the food processing industry, and the RPC Series tailored for environments with high-dust environments. These panel PCs offer various screen sizes, P-Cap or resistive touchscreens, and CPUs with different performance levels to meet diverse HMI needs.



### **Rugged Design**

Darveen's fanless industrial panel PCs, designed for efficient passive cooling, are adaptable for prolonged use in harsh industrial environments. With different IP waterproof and dustproof ratings, wide voltage input, and wide temperature operation capabilities, they serve as the ideal HMI solution for challenging industrial applications.



### Unique System Design

Our industrial panel PCs offer a multifunctional and robust computing platform with extensive capabilities, including isolated serial ports, isolated power supply boards, and built-in UPS modules. Darveen's unique modular design, which combines a modular I/O board and CPU mainboard, provides customers with a high level of I/O customization options and facilitates easy CPU platform upgrades.



### Flexible Installation and Comprehensive Accessories

We provide comprehensive installation solutions, supporting both VESA mount and panel mount. Additionally, a variety of accessories and mounting brackets are available, making it the ideal solution for HMI applications in industrial environments or as a selfservice kiosk.

# Industrial Panel PCs

### **DPC** Series

Processor:

DPC-7000 and DPC-8000 series: 10/11th Gen high-performance Intel<sup>®</sup> Core™ i processor DPC-9000 series: Intel<sup>®</sup> Core<sup>™</sup> U-Series / Celeron<sup>®</sup> processor • Screen size:

- DPC-7000 and DPC-8000 series: 15.6", 18.5", 21.5" LCD with P-Cap or resistive touchscreen DPC-9000 series: 8" to 21.5" LCD with P-Cap or resistive touchscreen
- Rugged aluminum housing and fanless design
- Supports Wi-Fi 6 (DPC-7000), Bluetooth, 4G, and 5G
- Supports VESA mount and panel mount
- IP65 rated front panel

### Android Panel PCs

### **APC** Series

- Rockchip RK3399 processor
- 10.1" to 21.5" LCD with P-Cap touchscreen
- Rugged aluminum enclosure and fanless design
- Supports Wi-Fi, 4G, and 5G
- Supports VESA mount and panel mount
- IP65 rated front panel

### Stainless Panel PCs

### **SPC Series**

- Intel<sup>®</sup> Core<sup>™</sup> i5 or Celeron<sup>®</sup> processor
- 15" to 19" LCD with resistive or P-Cap touchscreen
- Food-grade SUS304 stainless steel housing for corrosion resistance
- M12 I/O connectors
- Fanless and full IP66/IP65 protection
- Optional Wi-Fi, Bluetooth, 4G, and 5G

### **IP65 Waterproof Panel PCs**

### **RPC** Series

- Intel<sup>®</sup> Core<sup>™</sup> i5 or Celeron<sup>®</sup> processor
- 12" to 19" LCD with resistive or P-Cap touchscreen
- Rugged aluminum housing and fanless design
- M12 I/O connectors
- Fanless and full IP65 protection
- Optional Wi-Fi, Bluetooth, 4G

Need brackets or peripherals for your all-in-one panel PCs? We offer a wide selection of peripherals for various installations and applications. Please contact our sales team.









# **Industrial Displays**





### **Diverse Product Selections**

Darveen's industrial touch monitors provide a comprehensive range of LCD sizes, ranging from 8 to 21.5 inches. They feature resistive or P-Cap touchscreens with 4:3 and 16:9 aspect ratios, catering to a variety of applications. The open-frame series facilitates seamless integration into different machines.



### **High Durability**

Our industrial monitors boast an all-metal structure design, providing excellent seismic resistance and durability, as well as outstanding heat dissipation and rust resistance. The front panel is IP65 waterproof and dustproof. With its stable system architecture, Darveen's industrial monitors demonstrate the reliability in the challenging industrial environments.



### **High Brightness and High Readability**

Darveen's high-brightness industrial monitors feature a brightness of up to 1,000 nits, ensuring excellent visibility even in direct sunlight and outdoor use. The screen surface undergoes anti-glare and anti-fingerprint treatments, making it easy to clean and maximizing readability.



### **Flexible Installation Options**

All our monitors can be installed using either panel mount or the universal 75/100mm VESA mount. With flexible installation options, easy setup, and maintenance, our monitors can seamlessly integrate into most machines or various environments.

### Ultra-thin Industrial Monitors

### **DPM Series**

- 8" to 21.5" LED-backlit LCD with 5-wire resistive or P-Cap touchscreen
- Rugged aluminum enclosure
- Supports VGA, DVI, HDMI display interfaces
- DC in 12 to 24V
- Supports VESA 75/100 mount and panel mount
- IP65 compliant front panel

### **High-brightness Industrial Monitors**

### DPM High-brightness Series

- 10.1"/ 12.1"/ 15.6" LED-backlit LCD with capacitive touchscreen
- High brightness up to 1,000 nits
- Rugged aluminum enclosure
- Supports VGA, DVI, HDMI display interfaces
- DC in 12 to 24V
- Supports VESA 75/100 mount and panel mount
- IP65 compliant front panel

### **Open Frame Monitors**

### **OFM Series**

- 12.1" / 15" / 17" / 18.5" LED-backlit LCD
- Open frame architecture design
- Supports VGA, DVI, HDMI display interfaces
- High brightness from 700 to 2,000 nits (Optional)
- Sunlight readable
- Wide temperature customization (Optional)
- Supports VESA 75/100 mount







# **Embedded Box Computers**





### Full Range Offerings

Darveen offers a comprehensive range of embedded computing solutions for diverse applications, featuring x86 and ARM-based platforms and with various form factors. The MBC and MIC series provide extensive I/O interfaces and PCI/PCIe expansion options. The VBC series is equipped with multiple PoE LAN ports for machine vision, while the NBC and AEC series are compact embedded PCs for space-limited applications.



**Outstanding System Design** 

Darveen's embedded computers utilize aluminum housing for optimal heat dissipation. They feature a fanless and cableless design to minimize component damage and reduce computer downtime. Additionally, the modular design of the CPU mainboard and I/O board allows flexible customization according to customer requirements.



### **Rugged Reliability**

The rugged features include a fanless design, wide operating temperatures, robust aluminum housings, isolated serial ports, and wide voltage input, ensuring a significantly prolonged lifespan and high system availability.



### **Rich I/O Interfaces**

Darveen's embedded computers boast a variety of I/O interfaces for supporting major types of peripherals, including USB, LAN, COM, GPIO, and support 2.5-inch SATA/SSD or mSATA storage. Additionally, they come equipped with expansion slots like Mini PCI and PCI/PCIe, enabling wireless transmission or the addition of extra functionalities.

### **Fanless Box Computers**

### **MBC** Series

- Intel<sup>®</sup> Core<sup>™</sup> i7/i5/i3 or Celeron<sup>®</sup> processor
- Fanless and cableless design
- Modular and flexible I/O combination, easy for I/O board customization
- Rich I/O interfaces, including USB, LAN, GPIO, DIO, isolated COM
- Available with 2x PCI/PCIe expansion slots for GPU, network or other PCIe cards
- Wide range 9-36VDC power input
- Flexible expansion capability for Wi-Fi 6, Bluetooth, 4G, 5G, GPS, CAN2.0B

# **Modular Industrial Computers**

### **MIC Series**

- Intel<sup>®</sup> high-performance desktop Core<sup>™</sup> i / Celeron<sup>®</sup> / Pentium<sup>®</sup> processor
- Fanless and cableless design
- Modular and flexible I/O combination, easy for I/O board customization
- Rich I/O interfaces, including USB, LAN, GPIO, isolated COM
- Available with 2x or 4x PCI/PCIe extensive expansion slots for GPU, network or other PCIe cards
- Wide range 9-36VDC power input
- Flexible expansion capability for Wi-Fi 6, Bluetooth, 4G, 5G, GPS, CAN2.0B

### Machine Vision Computers

### **VBC** Series

- Intel<sup>®</sup> high-performance desktop Core<sup>™</sup> i7/i5/i3 processor
- Supports up to 6 xLAN (with 4 xPoE)
- 8x USB 3.0, 4x COM
- 16 channels isolated GPIO
- Available with 4x PCI/PCIe extensive expansion slots for GPU, network or other PCIe cards

# **Compact Embedded Computers**

### **NBC** Series

- Intel<sup>®</sup> low-power Core<sup>™</sup> i5 / Atom<sup>®</sup> / Celeron<sup>®</sup> processor
- Fanless and cableless design
- Rich I/O interfaces, including USB, LAN, COM, VGA, HDMI
- Wide range power input (Available on selected models)
- Available with 1x M.2 and 1x full length Mini PCIe socket
- Flexible expansion capability for Wi-Fi, Bluetooth, 4G, CAN2.0B

## **ARM-Based Embedded Computers**

### **AEC Series**

- Rockchip RK3399 / RK3568 processor
- Metal or aluminum structure, fanless design. Supports DIN-rail mount
- Rich I/O interfaces, including USB, COM, LAN, DIO, optional CAN port
- Supports WiFi, Bluetooth, 4G/5G, GPS
- Supports Android or Linux











# **Industrial Computers**





### Easy Setup for Your Custom Solution

Darveen offers industrial chassis solutions in various sizes such as 1U, 2U and 4U, which are compatible with standard form factors of motherboards. Customers can flexibly configure them according to their specific applications.



**Outstanding Industrial Design of Chassis** Darveen offers industrial-grade rack-mountable chassis and wall-mounted chassis solutions, supporting various standard industrial motherboards such as ATX, Micro-ATX, Mini-ITX, etc. The chassis features a well-designed airflow structure, ensuring optimal heat dissipation and suitability for industrial applications.



Versatile Industrial Motherboards Darveen's industrial motherboards deliver optimal performance and reliability for industrial applications. The I/O ports of these motherboards are integrated onto a single circuit board, allowing for easy use and quick setup. They are suitable for various applications, including communication, transportation, and industrial automation.



Suitable for Various Industrial Applications Darveen's industrial chassis solutions meet various demands by incorporating a range of features, including vPro, AMT, RAID, TPM 2.0, and Case Open. With multiple expansion slots and a durable design, they cater to many industrial automation tasks.

### Industrial Motherboards

### DMB Series

- Intel<sup>®</sup> 13/12/10/9/8/7/6th Gen Core<sup>™</sup> / Pentium<sup>®</sup> / Celeron<sup>®</sup> desktop processor
- Rich I/O interfaces for easy integration with peripheral devices including multiple COM, USB. GbE LAN
- Supports VGA, DVI, HDMI, eDP display interfaces
- Supports up to 7 PCI/PCIe expansion slots

# **Industrial Computer Chassis**

### **DIC Series**

- Compatible with ATX, Micro-ATX, Mini-ITX motherboards
- Supports up to 7 PCI/PCIe expansion slots
- Easy installation. Supports both horizontal and vertical mounting
- Compatible with high-power power supplies, high-power GPU cards, and standard fans







Parhelia B.V. www.parheliabv.com **()**+31(0)10 741 00 28