



*Industrial PC*

## Spectra Vision i6K 1213

**Modern 4U Industrial PC with 12th/13th Generation CPU  
for Machine Vision / AI Applications**

### Features

- Modern 4U Industrial PC
- 750 Watt AC Industrial Power Supply
- Industrial Mainboard with 7 PCIe Expansion Slots
- Intel® Core™ i7/i9 Processors of the 12th and 13th Generation
- NVIDIA Profi Graphics Card
- 4x Intel 2.5 Gigabit-LAN onboard
- Interfaces: 1x DP, 1x HDMI, 1x VGA, 4 x RJ45, 8 x USB3.2 Gen 2, 2 x USB3.2 Gen1 (Front), 1x COM, 2x Audio



# Spectra Vision i6K 1213

## Technical Data

### Basic Device Properties

#### System

Industrial Mainboard	For 24h/7d Operation, long-term available
CPU Socket	LGA1700 for 12th/13th Generation Intel® Core i3/i5/i7/i9 Alder / Raptor Lake up to 125 Watt
Chipset	Intel® R680
Memory Socket	<ul style="list-style-type: none"> <li>• 4x 288-Pin DDR5-DIMM</li> <li>• max. 128 GB PC4400 (ECC or Non-ECC)</li> </ul>

#### Controllers

Graphics	Intel® UHD-Graphics 770
Network	4x Intel 2.5 Gigabit-LAN
Audio	ALC897
TPM	Infineon® SLB9672VU2.0 Module

#### Expansion Slots

PCI-Express	<ul style="list-style-type: none"> <li>• 1x PCIe (x16) oder 2x PCIe(x8) 5.0</li> <li>• 4x PCIe(x4) 3.0</li> <li>• 1x PCIe(x1)</li> </ul>
Others	<ul style="list-style-type: none"> <li>• 1x M.2-Sockel (E-Key, 2230, CNVi)</li> <li>• 1x M.2-Sockel (B-Key, 2242/2280, PCIe x2)</li> </ul>

#### Drives

Connectors	<ul style="list-style-type: none"> <li>• 4x SATA-6G-Ports (AHCI, RAID 0/1/5/10)</li> <li>• 2x M.2-Socket (M-Key, 2280, Gen PCIe(x4), (1 of which reserved for System Drive)</li> </ul>
------------	--

#### Interfaces

Front	<ul style="list-style-type: none"> <li>• 2x USB3.2 Gen1 (5 Gbps), 1x USB3.2 Gen2 Typ C (20 Gbps)</li> </ul>
Rear	<ul style="list-style-type: none"> <li>• 1 x DP, 1 x HDMI, 1 x VGA</li> <li>• 4x RJ45</li> <li>• 8x USB3.2 Gen2 Typ A (10 Gbps)</li> <li>• 1x RS-232/422/485</li> <li>• 2x Audio jacks (Line Out + Mic In)</li> </ul>
Internal (not activated)	2 x USB3.2 Gen1 Typ A (5 Gbps), 3 x USB2.0 (480 Mbps), 2x Pfostentecker und 1x Typ A vertikal für Dongles, 5 x COM (RS-232/422/485)

### Mechanical & Environment Conditions

Chassis	<ul style="list-style-type: none"> <li>• modern 4U Chassis</li> <li>• Suitable for 7 Slots for Expansion Cards or Apertures</li> <li>• Drive bay for 2x 5.25" (exposed); 1x 3.5"/2.5" (internal)</li> <li>• 2x 80 und 2x 120 mm Chassis fans</li> <li>• Front-Panel: 1x Power, 1x Reset, 2x USB3 A und 1x USB C</li> <li>• Color: Black</li> </ul>
Power Supply	<ul style="list-style-type: none"> <li>• 750 Watt Industrial Power Supply, 80plus Gold</li> <li>• 1x 80 mm Fan</li> <li>• MTBF: &gt;100.000 h @ 25° C</li> </ul>
Dimensions (WxHxD)	430 x 176 x 468 mm
Weight (net/gross)	approx. 14 kg / 18 kg
Temperatures	<ul style="list-style-type: none"> <li>• Operating temperature: 0°C ~ +50°C</li> <li>• Rel. Humidity: 5% ~ 90%, non condensing</li> </ul>
Warranty	24 months
Certificates	CE, EN 62368-1, EN 61000-6-2

# Spectra Vision i6K 1213

## Systems Configurations

### Pre-defined Systems

Model	Spectra Vision i6K i7-12700E-11	Spectra Vision i6K i9-12900E-11
Article n°	172202-16-512G-A2000-W11	172202-32-1T-A4000-W11
Processor	Intel® Core™ i7-12700E	Intel® Core™ i9-12900E
RAM	16 GB DDR5	32 GB DDR5
SSD	512 GB M.2 NVMe	1 TB M.2 NVMe
	Nvidia RTX A2000 12GB	Nvidia RTX A4000 16GB
Operating System	Microsoft® Windows® 11 IoT Enterprise LTSC 2024, 64-bit, German / English	
Operating Temperature	0°C ~ +50°C	0°C ~ +50°C

Model	Spectra Vision i6K i7-12700E	Spectra Vision i6K i9-12900E
Article n°	172202-16-512G-A2000-W10	172202-32-1T-A4000-W10
Processor	Intel® Core™ i7-12700E	Intel® Core™ i9-12900E
RAM	16 GB DDR5	32 GB DDR5
SSD	512 GB M.2 NVMe	1 TB M.2 NVMe
	Nvidia RTX A2000 12GB	Nvidia RTX A4000 16GB
Operating System	Microsoft® Windows® 10 IoT Enterprise LTSC 2021, 64-bit, German / English	
Operating Temperature	0°C ~ +50°C	0°C ~ +50°C

### System Configuration Options

#### Processor

- Intel Core i7-12700E (65 Watt, 8 Performance Cores @ 2,1 GHz + 4 Efficiency Cores)
  - Intel Core i7-13700E (65 Watt, 8 Performance Cores @ 1,9GHz + 8 Efficiency Cores)
  - Intel Core i9-12900E (65 Watt, 8 Performance Cores @ 1,9 GHz + 8 Efficiency Cores)
  - Intel Core i9-13900E (65 Watt, 8 Performance Cores @ 1,8GHz + 16 Efficiency Cores)
  - Intel Core i9-12900K (125 Watt, 8 Performance Cores @ 3,2GHz + 8 Efficiency Cores)
  - Intel Core i9-13900K (125 Watt, 8 Performance Cores @ 3,0GHz + 16 Efficiency Cores)
- (K-Processors with 125W are not long-term available!)

#### Memory

- 16GB / 32GB / 64GB / 128GB DDR5 RAM (ECC optional)

#### Drives

- 256GB / 512GB / 1TB / 2TB NVME M.2 SSD as System Drive
- Up to 4x 2.5" SATA SSD/HDD as Data Drive (RAID1 & Wechselrahmen optional)

#### Graphics Cards

- PNY Nvidia RTX A2000/12GB-SB (PCIe4.0, D-LPFL, 4mDP, 70W)
- PNY Nvidia RTX A4000/16GB (PCIe4.0, S-LPFL, 4DP, 140W)
- PNY Nvidia RTX 4000 Ada/20GB (PCIe4.0, Single Slot, 4DP, 130W)
- PNY Nvidia RTX A5000/24GB-SB (PCIe4.0, D-FHFL, 4DP, 230W)

Up to 2 graphics cards possible, depending on the choice a more powerful power supply unit may be installed.

#### Operating Systems (incl. USB-Recovery-Stick and Acronis True Image)

- Windows 11 IoT Enterprise
- Windows 10 IoT Enterprise
- Windows 11 Pro

#### Ask us!



+49 (0) 7121 1432-150



+43 (0) 7240 20190



+41 (0) 43 27710-50

# Spectra Vision i6K 1213

## Details



- ATX Power
- Power-LED, Reset
- HDD-LED
- Mic-in, Line-out
- USB 3.2 Gen1, Typ-A
- USB 3.2 Gen2, Typ-C



Interior



Upright as Tower

All brand, company and product names are registered or otherwise protected works of their respective companies / owners. We reserve the right to change specifications and product description at any time without prior notice (Stand June 2024)