

Tensor PC By Compulab



Tensor-I20 pre-configured barebone versions

Revision 2.0
26-April-2021

Table of Contents

Tensor-I20 Multi-LAN	2
Tensor-I20 Multi-COM	3
Tensor-I20 Multi-PoE	4
Tensor-I20 Multi-IoT	5

Tensor-I20 Multi-LAN

Tensor-I20 Multi-LAN is a fanless, fully configurable industrial PC, featuring 9 LAN ports and full PC capabilities.

Ideal for Firewalls, switches, routers, virtual servers, etc.



Features

- Intel Core i5-9300H CPU at 25W
- Up to 64GB DDR4 RAM
- 1x DisplayPort + 1x mini DisplayPort + 1x HDMI
- 1x M.2 Key-M for optional NVMe storage
- **9x 1GbE full-bandwidth LAN**
- 4x USB 3.1
- 1x M.2 Key-E with Wi-Fi / BT module
- 1x M.2 Key-B for optional M.2 Cellular modem
- Headphones out + mic. in on 3.5mm jacks
- Power: 12V, including 100-240V 60W PSU and AC cord
- Enclosure: Width 30cm | Internal height 25mm | Ribs 10mm
- Dimensions: 20x30x3.5cm

Full PN: TENSOR-I20A-EW30-EH25A-ECR10-C9300-WX200-FCA*2-FD-FEA-FF-FG-FI-FJ-FK-FO

Optional installations:

RAM: Non ECC 8GB/16GB/32GB/64GB | ECC 16GB/32GB/64GB

Storage: NVMe SSD 256GB/1TB

Wi-Fi/BT: Wi-Fi 6/ Bluetooth 5.1 AX200

Modem: LTE Modem Sierra EM7455

TPM: TPM 2.0 Infineon SLM 9670AQ2.0

OS: Windows 10 Professional / Linux Mint

TEls in the configuration:

- | | |
|-------------------|--|
| 1x PM-12V - | Power module for 12VDC with twist lock, Incl. 60W PSU |
| 2x TEL-LAN4 - | 4x Gbit Ethernet |
| 1x TEL-AUDIO | Analog headphones / line-out + microphone on 2x 3.5mm |
| 1x TEL-USB3X4V - | 4x USB 3.1 type A |
| 1x TEL-NVME - | Compartment for an M.2 NVMe SSD |
| 1x TEL-STD - | DisplayPort + Gbit Ethernet |
| 1x TEL-M2B - | Compartment for M.2 key-B card with SIM card tray + 2 antennas |
| 1x TEL-M2E - | Compartment for M.2 key-E card + 2 antennas |
| 1x TEL-HDMIMINIDP | HDMI + mini DisplayPort |

Common configuration changes for this model:

- Processor options: Intel Xeon E-2276ML/Core i7-9850HL/i5-9300H/i3-9100HL/Celeron C4932E
- Reduction in quantity of LAN ports
- Additional USB ports

Note: Some configuration changes may require enclosure enlargement

Tensor-I20 Multi-COM

Tensor-I20 Multi-COM is a fanless, fully configurable industrial PC, featuring 8 RS232/RS485 half/full duplex ports and full PC capabilities.

Ideal for industrial control stations, test and measuring equipment, bar code scanners and other point of sale devices.



Key features

- Intel Celeron G4932E CPU at 15W
- Up to 64GB DDR4 RAM
- 1x DisplayPort
- 1x M.2 Key-M for optional NVMe storage
- 1x GbE LAN
- 8x RS-232/RS-485 on DB9
- 4x USB 3.1
- Power: 12V, including 100-240V 60W PSU and AC cord
- Enclosure: Width 20cm | Internal height 49mm | Ribs 10mm
- Dimensions: 20x20x5.9cm

Full PN: TENSOR-I20A-EW20-EH49AC-ECR10-C4932-FEA-FF-FG-FH*2-FHB*6-FJ-F0

Optional installations:

RAM: Non ECC 8GB/16GB/32GB/64GB | ECC 16GB/32GB/64GB

Storage: NVMe SSD 256GB/1TB

TPM: TPM 2.0 Infineon SLM 9670AQ2.0

OS: Windows 10 Professional / Linux Mint

TEls in the configuration:

- | | | |
|----|---------------|---|
| 1x | PM-12V - | Power module for 12VDC with twist lock, Incl. 60W PSU |
| 1x | TEL-USB3X4V - | 4x USB 3.1 type A |
| 1x | TEL-NVME - | Compartment for an M.2 NVMe SSD |
| 1x | TEL-STD - | DisplayPort + Gbit Ethernet |
| 2x | TEL-SERX4 - | Up to 4x RS-232/RS-485 on DB-9 |
| 6x | TEL-SERDB9 | DB9 extension (used w/ TEL-SERX4) |

Common configuration changes for this model:

- Processor options: Intel Xeon E-2276ML/Core i7-9850HL/i5-9300H/i3-9100HL/Celeron C4932E
- Reduction in quantity of RS-232/RS-485 ports
- Additional USB ports

Note: Some configuration changes may require enclosure enlargement

Tensor-I20 Multi-PoE

Tensor-I20 Multi-PoE is a fanless, fully configurable industrial PC, featuring **8 PoE source (PSE)** ports and full PC capabilities.

Ideal for VoIP phones, IP cameras including PTZs, WAPs, IP TV (IPTV) decoders, Network routers, etc.



Key features

- Intel Core i5-9300H CPU at 25W
- Up to 64GB DDR4 RAM
- 1x DisplayPort + 1x mini DisplayPort + 1x HDMI
- 1x M.2 Key-M for optional NVMe storage
- 1x GbE LAN
- **8x 1GbE full-bandwidth PoE source**
- 4x USB 3.1
- 1x M.2 Key-E with Wi-Fi / BT module
- 1x M.2 Key-B for optional M.2 Cellular modem
- Headphones out + mic. in on 3.5mm jacks
- Power: 1x 12V + 1x 12-56V, inc. 2x 100-240V 60W PSU
- Enclosure: Width 30cm | Internal height 25mm | Ribs 20mm
- Dimensions: 20x30x4.5cm

Full PN: TENSOR-I20A-EW30-EH25A-ECR20-C9300-WX200-FD-FEA-FF-FG-FI-FJ-FK-FO-FP-FU*4

Optional installations:

RAM: Non ECC 8GB/16GB/32GB/64GB | ECC 16GB/32GB/64GB

Storage: NVMe SSD 256GB/1TB

Wi-Fi/BT: Wi-Fi 6/ Bluetooth 5.1 AX200

Modem: LTE Modem Sierra EM7455

TPM: TPM 2.0 Infineon SLM 9670AQ2.0

OS: Windows 10 Professional / Linux Mint

TEs in the configuration:

- | | |
|-------------------|--|
| 1x PM-12V - | Power module for 12VDC with twist lock, Incl. 60W PSU |
| 1x PM-WIDE - | Power module for 12-56VDC with lock, Incl. 120W PSU |
| 1x TEL-AUDIO - | Analog headphones / line-out + microphone on 2x 3.5mm |
| 1x TEL-USB3X4V - | 4x USB 3.1 type A |
| 1x TEL-NVME - | Compartment for an M.2 NVMe SSD |
| 1x TEL-STD - | DisplayPort + Gbit Ethernet |
| 1x TEL-M2B - | Compartment for M.2 key-B card with SIM card tray + 2 antennas |
| 1x TEL-M2E - | Compartment for M.2 key-E card + 2 antennas |
| 1x TEL-HDMIMINIDP | HDMI + mini DisplayPort |
| 4x TEL-POEX2 - | 2x Gbit Ethernet with PSE PoE (802.3at Type 1, 13W per port) on RJ45 |

Common configuration changes for this model:

- Processor options: Intel Xeon E-2276ML/Core i7-9850HL/i5-9300H/i3-9100HL/Celeron C4932E
- Reduction in quantity of PoE ports
- Additional USB ports

Note: Some configuration changes may require enclosure enlargement

Tensor-I20 Multi-IoT

Tensor-I20 Multi-IoT is a fanless, fully configurable industrial PC, featuring IoT interfaces and full PC capabilities.

Ideal for IoT Gateways and Industrial Control stations.



Key features

- Intel Celeron G4932E CPU at 15W
- Up to 64GB DDR4 RAM
- 1x DisplayPort
- 1x M.2 Key-M for optional NVMe/SATA storage
- 1x GbE LAN port
- 4x RS-232
- 1x CAN bus
- 4x GPIO
- 4x USB 3.1
- 1x M.2 Key-E with Wi-Fi / BT module
- 1x M.2 Key-B for optional M.2 Cellular modem
- Power: 12V, including 100-240V 60W PSU and AC cord
- Enclosure: Width 20cm | Internal height 25mm | Ribs 10mm
- Dimensions: 20x25x3.5cm

Full PN: TENSOR-I20A-EW20-EH25A-ECR10-C4932-WX200-FEA-FF-FG-FH-FHB*3-FI-FJ-FO-FQ-FS

Optional installations:

RAM: Non ECC 8GB/16GB/32GB/64GB | ECC 16GB/32GB/64GB

Storage: NVMe SSD 256GB/1TB

Wi-Fi/BT: Wi-Fi 6/ Bluetooth 5.1 AX200

Modem: LTE Modem Sierra EM7455

TPM: TPM 2.0 Infineon SLM 9670AQ2.0

OS: Windows 10 Professional / Linux Mint

TEls in the configuration:

- | | |
|------------------|--|
| 1x PM-12V - | Power module for 12VDC with twist lock, Incl. 60W PSU |
| 1x TEL-USB3X4V - | 4x USB 3.1 type A |
| 1x TEL-NVME - | Compartment for an M.2 NVMe SSD |
| 1x TEL-STD - | DisplayPort + Gbit Ethernet |
| 1x TEL-SERX4 - | Up to 4x RS-232/RS-485 on DB-9 |
| 3x TEL-SERDB9 - | DB9 extension (used w/ TEL-SERX4) |
| 1x TEL-CANBUS - | Isolated CAN bus on DB9 |
| 1x TEL-M2B - | Compartment for M.2 key-B card with SIM card tray + 2 antennas |
| 1x TEL-M2E - | Compartment for M.2 key-E card + 2 antennas |
| 1x TEL-GPIO - | Terminal block of 4x GPIO + 4 headers of 4 GPIO each |

Common configuration changes for this model:

- Processor options: Intel Xeon E-2276ML/Core i7-9850HL/i5-9300H/i3-9100HL/Celeron C4932E
- Additional GPIO ports
- Additional RS-232/RS-485 ports
- Additional USB ports

Note: Some configuration changes may require enclosure enlargement