Transduction

Intel Core i7 12th- Generation 14-Core, 20-Threads Processor

TR-ALDERLAKE-12



TR-ALDERLAKE-12 computer has been designed to offer high performance in a smaller chassis. The design is based on the 12th generation Intel i7-12800HE mobile processor with 14 Cores and 20 Threads. Operating range of temperature is $0-60^{\circ}$ C ($32-140^{\circ}$ F), it can be used as desktop or panel mount with included mounting brackets.

The ITX industrial motherboard is based on Intel IRIS chipset with Xe graphics. Display Port and HDMI video connectors.

High speed 14-core processing power in tandem with high performance chipset makes this computer useful for high resolution signage, radar, and sonar applications.

This computer has PCIe x16 expansion slot that accepts 3/4" length low rise option card.

This computer can be supplied with one NVMe SSD or two (RAID1) 2.5" SATA hard drives or flash drives.

Power options are universal AC 50/60 Hz and DC power of 12, 24, 48, 125 and 250V. Maximum power consumption is 100W.

Two high quality ball bearing fans are used to remove hot air enveloped from internal components in the chassis. Speed of the air fans is monitored and controlled by motherboard.

Warranty is 3 years with technical support for life.

TR-ALDERLAKE-12 Small Panel PC w/ 12th Gen. CP

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Intel Core i7 12th- Generation 14-Core, 20-Threads Processor

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Specification

Model

TR-ALDERLAKE-12 Industrial half fanless panel mount computer

Processor

- Intel 12th Gen. H 14-Core, 20-threads, 12800HE i7 2.4GHz
- Turbo 4.6GHz

Chipset

· Intel IRIS with Intel Xe graphics

BIOS

Phoenix Secucore

Memory

 2 x DDR5 SO-DIMM 4800MHz up to 64GB, non-ECC

Ethernet

- 1 x Intel I219-LM Gigabit PHY LAN with AMT 16.0 support
- 2 x Intel I226-LM Gigabit LAN

Display

 1 x DVI 2 X HDMI and 2 x DisplayPort port for multiple display support

Disk Storage

Super fast NVMe up to 500GB

CD-DVD-R/W (Optional)

External USB

Audio

· Realtek ALC888S high definition sound

Expansion

1 x PCle x16 3/4" low rise slot

External I/O Ports

 1 x DVI port, 2 x DisplayPort ports, 2 x HDMI ports, 2 x LAN ports, 2 x RS232/422/485 serial port, 4 x USB 3.2 ports, 2 x USB 2.0 ports and 1 x 3-channel audio

Optional Wi-Fi and Bluetooth

Watch-Dog Timer

 System reset programmable watchdog timer with 1 ~ 255sec time-out value

Operating Temperature

• 0 ~ 50°C (32 ~ 122°F), 60°C (140°F) for 2 hours

Storage Temperature

• -20 ~ 85°C (-4 ~ 185°F)

Cooling

2 x ball bearing air fans operating at low speed

Humidity

- Operating: relative humidity 10 ~ 90%, non-condensing
- Storage: relative humidity 45% max., non-condensing

Power Requirement

- DC input 9-35VDC, max. 100W
- 100W universal AC 50/60Hz
- Optional DC input for 12, 24, 48, 125 and 250V

Shock & Vibration

25G and 5G

Compliance: Electrical Safety Approval, CE and FCC Class A

Compatible with Windows 11 and Windows 10

Dimensions

4.250" (including mounting brackets (H) x 7.500" (D) x 9.725" (W)

Weight

2kg (4.4lbs)

Warranty: 3 years with technical support for life

Options

- Memory up to 64GB
- NVMe storage up to 500GB
- Wi-Fi and Bluetooth
- External USB CD-DVD-R/W
- DC input for 12, 24, 48, 125 and 250V