

# TT 300-F20/F21/F22/F23

6, 7, 8, 9th Gen Intel® Core™ i7/i5/i3  
Fanless System with Expansion



## Main Features

- ♦ Support 6, 7, 8, 9th Gen Intel® Core™ i7/i5/i3 socket type processor
- ♦ Intel® H310C PCH
- ♦ 2 x HDMI (dual display)
- ♦ 4 x USB 3.0
- ♦ 2 x RS232/422/485, 8 x RS232
- ♦ 1 x M.2 2280 Key M (storage)
- ♦ 1 x M.2 2242/3042 Key B (wireless connectivity)
- ♦ 1 x mSATA/miniPCIe (co-lay)
- ♦ 2 x PCIe x4
- ♦ 1 x Nano SIM card socket
- ♦ Support +12V / 24VDC input; support ATX power mode

## Product Overview

The newest addition to NEXCOM's fanless systems for factories and production lines is so versatile that, with its appearance, you might be convinced that it can even toast bread! The TT Series kicks off with the 300 model and two variants, with (TT 300-F31) or without (TT 300-F01) expansion extender. Choosing the extender means that you have numerous expansion capabilities at your fingertips, including a graphics card for advanced AI and predictive maintenance uses. With or without the extension, the TT 300 is an all-around fanless computer that supports an extensive range of 6th, 7th, 8th, and 9th Intel® CPUs, giving you the flexibility to adapt to both older Windows 7 and newer Windows 10 operating systems, rather than completely overhauling your ecosystem. The onboard M.2 slots are perfect for storage or communication, while the TT 300's lightweight but sturdy design ensures that it's the winning choice for industrial environments.

## Specifications

### CPU Support

- ♦ Support 6, 7, 8, 9th Gen Intel® Core™ i7/i5/i3 socket type processor
  - Intel® Celeron® G4900T, 2 Core, 2.9GHz, 2M Cache
  - Intel® Core™ i5-8500T, 6 Core, 2.1GHz, 9M Cache
  - Intel® Core™ i7-8700T, 6 Core, 2.4GHz, 12M Cache

### Main Memory

- ♦ 1 x DDR4 2133/2400/2666 SO-DIMM socket, supports up to 16GB

### Display Option

- ♦ Dual independent display
  - 2 x HDMI

### Front I/O Interface Status LEDs

- ♦ 2 x GPO status
- ♦ COM TX/RX LEDs

### Front I/O Interface

- ♦ ATX power on/off switch
- ♦ 4 x USB 3.0 ports
- ♦ 2 x HDMI
- ♦ 1 x Intel® I210-IT and 1 x Intel® I219LM GbE LAN ports
- ♦ 10 x DB9 for COM1 to COM10
  - COM1/2: RS232/422/485 auto flow control
  - COM3/4/5/6/7/8/9/10: RS232 only

### Rear I/O Interface

- ♦ 4 x Antenna holes

### Storage Device

- ♦ 2 x SATAIII 2.5" SSD
- ♦ 1 x M.2 2280 (Key M, PCIe x1, SATA)
- ♦ 1 x M.2 2242/3042 (Key B, PCIe x1, USB 2.0)
- ♦ 1 x mSATA (co-lay with mini-PCIe)

### Expansion Slot

- ♦ 1 x Optional system fan kit
- ♦ 2 x PCIe x4 (only support PCIe x1 signal)
  - Add-on card length: 169mm max.
  - Power consumption: 10W/slot max
- ♦ 1 x mini-PCIe socket support optional Wi-Fi/3.5G/4G LTE (co-lay with mSATA)

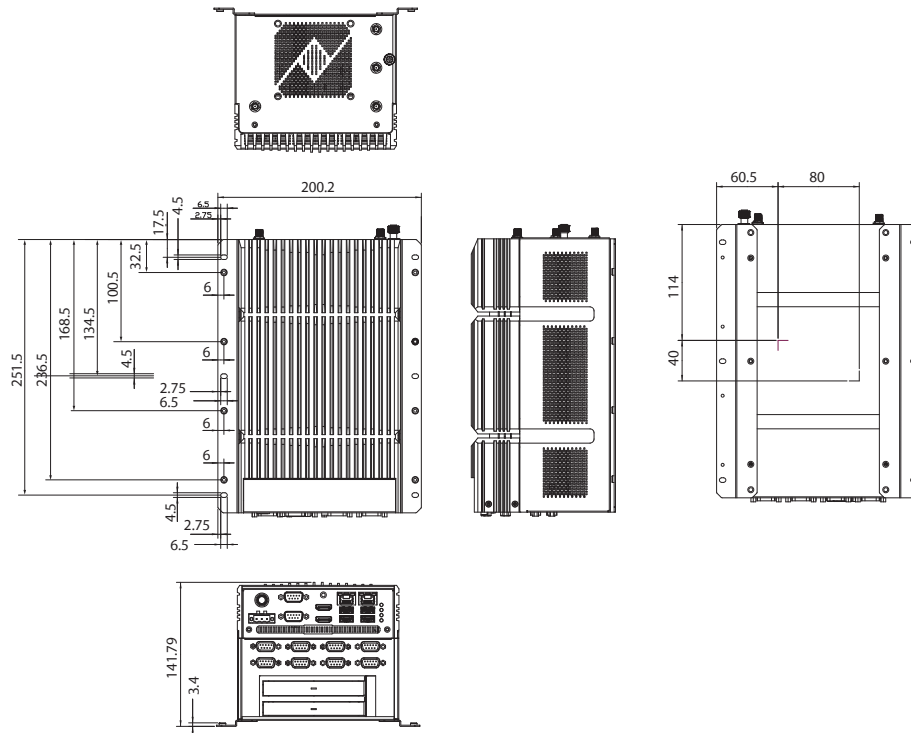
### I/O Interface-Internal

- ♦ 1 x Nano SIM card slot
- ♦ 22 x GPI and 22 x GPO by pin header (programmable to GPI or GPO)

### Power Requirements

- ♦ AT/ATX power mode (default: ATX power mode)
- ♦ Power input: +12/ +24V DC in
- ♦ Power adapter: optional AC to DC power adapter (24V DC, 120W / 180W)

## Dimension Drawing



### Dimensions

- ♦ 269(W) x 159(D) x 136(H) without wall mount bracket

### Construction

- ♦ Aluminum and metal chassis with fanless design

### Environment

- ♦ Operating temperature:  
Ambient with air flow: -5°C to 50°  
(according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- ♦ Storage temperature: -20°C to 80°C
- ♦ Relative humidity: 10% to 95% (non-condensing)
- ♦ Shock protection:
  - SSD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- ♦ Vibration protection with SSD & M.2 condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- ♦ Vibration protection with SSD & M.2 condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

### Certifications

- ♦ CE approval- EN61000-6-2- EN61000-6-4
- ♦ FCC Class A

### OS Support

Windows 10 64-bit

### Weight Information

- ♦ Gross weight: 5.3kg
- ♦ Net weight: 4.4kg

## Ordering Information

- ♦ TT 300-F20 with out CPU (P/N: 10JT0030009X0)
- ♦ TT 300-F21 with CPU Celeron G4900T (P/N: 10JT0030002X0)
- ♦ TT 300-F22 with CPU i5-8500T(P/N: 10JT0030010X0)
- ♦ TT 300-F23 with CPU i7-8700T(P/N: 10JT0030011X0)
- ♦ 24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120029X00)
- ♦ 24V, 180W AC to DC power adapter w/o power cord (P/N: P/N: 7400180012X00)