



Specifications

Product Name		FA3100TX model 800	
		Single Disk Model	RAID model
Processor	Main Processor	Intel® Xeon® W-1270TE(2.0GHz)	
	No. of Cores/No. of Threads <sup>*1</sup>	8/16	
	Level 2 Cache Memory	256 KB/Core (built into main processor)	
	Level 3 Shared Cache Memory	16 MB (built into main processor)	
Chipset		Intel® W480E Chipset	
Main Memory <sup>*2</sup>	Capacity	Min.8GB (8GB×1), Max. 32GB (16GB×2)	
	Memory	DDR4-SDRAM (DDR4-2933 SDRAM / PC4-23400) with ECC function, DIMM 2 sockets	
Auxiliary Storage	Built-in HDD	Options(Refer to Optional Hardware Specifications)	
	Built-in SSD <sup>*3</sup>		
	Built-in DVD-ROM <sup>*4</sup>		
RAID Compatible		—	RAID1, RAID1+HS(Hot Spare Disk), RAID5
Interface	COM Interface	RS-232C (9-pin D-SUB) × 2ch (rear)	
	Graphic Interface <sup>*5</sup>	RGB × 1 ch, DisplayPort <sup>®</sup> × 1ch (rear) CPU-chipset with built-in graphics function	
	LAN Interface	10BASE-T/100BASE-TX /1000BASE-T (Auto Negotiation) (RJ45) × 4 ch (rear) Wake On LAN (compatible for main unit port only)	
	Sound Interface <sup>*7</sup>	LINE OUT (3.5φ mini jack) (rear)	
	USB Interface <sup>*8</sup>	USB 5Gbps × 6 (front2/rear4)	
	DI/DO Interface	Option(Refer to Optional Hardware Specifications)	
Expansion Interface	PCI-Express (x16) <sup>*9</sup>	1 slot (full size) PCI Express 3.0	
	PCI-Express (x4) <sup>*9</sup>	2 slot (full size x1 half size x 1) PCI Express 3.0 Exclusive to RAID controller board in models with RAID disk	
	PCI slot <sup>*10</sup>	4 slots (full size) PCI 2.2 32 bit/33 MHz/5 V power supply	
Input Device	Keyboard	USB 109 keys (Japanese OS), 104 keys (English OS)	
	Mouse	USB (optical)	
RAS Function		Fan stop detection, CPU temperature rise detection, Internal temperature detection, Internal voltage detection, Memory error detection, Digital input/output <sup>*11</sup> (DI/DO 4 points each; Remote control input 1 point), Watchdog timer monitoring (at system startup/during system operation), RAID disk monitoring, Software power off (shutdown), Remote initialization or Remote power control, Error information saved on RAS memory, Operating time monitor function, Temperature information trend function, Simulation function	
Power Supply (Wide Range Power Supply) <sup>*12</sup>		Rated voltage 100 VAC-240 VAC, allowable voltage 85 VAC-264 VAC, allowable frequency 50 Hz/60 Hz±3 Hz	
Electric Power Consumption <sup>*13</sup>		Max. 461W / 480VA	
Dimensions and Weight		430 (W) × 170 (H) <sup>*14</sup> × 460 (D) mm Weight: about 15 kg	
Items included in shipment package		AC power cable (1), AC power cable clamp (1), Rubber foot (4 pieces), Security key (1 set), Mouse, Keyboard, product recovery media (with OS pre-installed models <sup>*15</sup> ), instruction manual PDF (included on optical media)  * Items other than those listed above may be included depending on the configuration of the system ordered.	
Software (OS) <sup>*16-17</sup>		Windows® 10 IoT Enterprise 2021 LTSC (Japanese or English selectable) (64bit) <sup>*18</sup> Windows® 10 IoT Enterprise 2019 LTSC (Japanese or English selectable) (64bit) <sup>*18</sup> Windows Server® 10 2022 Standard (Japanese version/English version) (64bit) <sup>*19</sup> Windows Server® IoT 2019 Standard (Japanese version/English version) (64bit) <sup>*19</sup> MIRACLE LINUX 8.6 (64bit)	

<sup>\*1</sup> The hyper-threading function is disabled in the factory setting. To enable this function, the BIOS setting must first be changed.

<sup>\*2</sup> As the product supports dual channels, communication speed between the memory and CPU improves when 2 memory modules are mounted. Operation will not be guaranteed if you combine other than the genuine memory modules for Toshiba industrial computers.

<sup>\*3</sup> A “SMART support software” tool that can be used to predict SSD life is not pre-installed.

In case of an OS pre-installed model, an installation program is stored on the internal storage. Customers can install and use the program as needed. Also, mixed use of the SSD and HDD is only possible with the single disk model.

<sup>\*4</sup> No expansion at customer site because of pre-shipment options.

<sup>\*5</sup> The graphic interface (multi-display) support details are as follows:

Connector	Number of connected monitors	Multi-display		
		Extended desktop	Clone display	Combined desktop (collage mode)
RGB ×1	1	—	—	—
DisplayPort ×1	1	—	—	—
RGB ×1+DisplayPort ×1	2	○	○	○
DisplayPort ×2	2	○	○	—
DisplayPort ×3	3	○	○	—
RGB ×1+DisplayPort ×2	3	○	○	—

○ Supported      — Not supported

<sup>\*6</sup> The DisplayPort of this product supports Display audio. When outputting audio from a display connected to a DisplayPort, use a cable and display that support DisplayPort audio. This product’s DisplayPort supports MST (Multi Stream Transport) and can output video to up to three displays in daisy chain connection (total Link Bandwidth connection possible up to 21.6 Gbps). Please correctly connect the Input and Output of MST-compatible displays.

<sup>\*7</sup> Use correcting units that meet the specifications below.

Terminal	Maximum Voltage	Remarks
LINE OUT	1 Vrms	Load impedance 10 kΩ to 600 kΩ

<sup>\*8</sup> USB interface does not always guarantee the operation of all the USB peripherals.

<sup>\*9</sup> PCI Express slot (half size) board size (167.65 mm (L) × 111.15 mm (H) or less) mountable. PCI Express slot (full size) board size (312 mm (L) × 111.15 mm (H) or less) mountable.

Optional Hardware Specifications

Built-in HDD	Single disk model capacity: 4 TB 2 units mountable RAID model capacity: 500GB or 4TB 3 units mountable (hot swap compatible)
Built-in SSD <sup>*3</sup>	Single disk model capacity: 128GB or 512GB 2 units mountable RAID model capacity: 160GB or 400GB 3 units mountable (hot swap compatible)
Built-in DVD-ROM <sup>*4</sup>	Read Media DVD-ROM, CD-ROM, DVD-R, DVD+R, DVD-RW, DVD+RW, CD-R, CD-RW
LED Display Module <sup>*4</sup>	POST code display function during unit startup, RAS status lamp function to display hardware operating status (cooling fan, battery voltage, internal temperature)
DI/DO Interface <sup>*4</sup> (Without Power Supply)	(DI/DO board) Digital input/output (half-pitch 20-pin) DI 4 points, DO4 points, Remote control input 1point
DI/DO Interface <sup>*4</sup> (With Power Supply)	(DI/DO board) Digital input/output (half-pitch 36-pin) DI 4 points, DO4 points, Remote control input 1point
RAS Terminal Board (For No Power Supply)	DI 4 points, DO 4 points, Remote control input 1 point
RAS Cable ( For No Power Supply)	Half pitch 20-pin male at both ends, Cable length 1 m or 2 m
RAS Terminal Board Mounting Panel	Simplified type
Rack Mounting Brackets	2 in each set
Slide Rail(L/S) <sup>*20</sup>	2-step slide rail (2 steps in 1 set)
Slide Rail Support Bracket	Bracket (1 set) to secure the slide rail to the rack
Instruction Manual (Bound Booklet)	FA3100TX model 800 unit instruction manual, RAS support software instruction manual, RAID controller instruction manual

Installation Environment Conditions

Installation Environment	Temperature (Operating/While Stored)	5 to 40°C/-10 to 50°C
	Humidity (Operating/While Stored)	20 to 80% RH (no condensation)/10 to 90% RH (no condensation)
	Vibration (Operating) <sup>*21</sup>	With HDD configuration: 2.0 m/s <sup>2</sup> (JIS C60068-2-6:9 to 150Hz 1 cycle) With SSD configuration: 4.9 m/s <sup>2</sup> (JIS C60068-2-6:9 to 150Hz 1 cycle)
	(While Packed)	19.6 m/s <sup>2</sup> or less
	Shock (Operating/While Packed)	19.6 m/s <sup>2</sup> or less / 245 m/s <sup>2</sup> or less
	Dust	0.3 mg/s <sup>3</sup> or less (JEITA IT-1004A Class B compliant)
	Corrosive gas / chemicals	Not to be detected (JEITA IT-1004A Class A compliant)
Allowable Instantaneous Power Failure Time		20 ms or less at the rated input voltage <sup>*22</sup>

<sup>\*10</sup> PCI slot (full size) board size (312 mm (L) × 106.68 mm (H) or less) mountable.

Installable PCI boards are 5V key boards and 5V/3.3V shared key boards (Boards of 3.3V keys only cannot be installed).

<sup>\*11</sup> To use the digital input/output function, optional hardware is required (DI/DO interface, RAS terminal block and RAS cable).

<sup>\*12</sup> This model has a power supply with a built-in PFC (power factor correction) circuit. If you are using a UPS (uninterrupted power supply), select a sine wave output type.

<sup>\*13</sup> As a reference value to power consumption, when no peripherals are connected to the FA3100TX model 800 main unit (16 GB memory × 2, HDD × 3 (RAID5)), the maximum power consumption is about 170 W during startup of the main unit, and about 120 W after startup when the application is not running.

<sup>\*14</sup> Shown with 10-mm rubber feet on.

<sup>\*15</sup> Windows adopts optical media and MIRACLE LINUX adopts a USB memory device.

<sup>\*16</sup> Of the Operating Systems listed here, your specified OS will be installed.

OS supply period is subject to change depending on the OS distribution period of the OS supplier.

<sup>\*17</sup> If Windows is in use, the following functions are outside the scope of your support. Windows Bitlocker, power-saving modes (suspend, hibernation), Windows fast startup, Windows Hello.

<sup>\*18</sup> Please note that Windows® 10 IoT Enterprise 2021 LTSC or Windows® 10 IoT Enterprise 2019 LTSC is the only pre-installation option we support. We do not support any other versions, servicing models or editions. For language selection, select either Japanese or English at the initial setup.

<sup>\*19</sup> Client Access License (CAL) includes five licenses of Windows Server CAL. It does not include CAL for other specific functions. The secure boot function, Windows Bitlocker is not supported.

<sup>\*20</sup> Two types of slide rails are available to accommodate racks with different depth. For details, see the external dimensions diagram.

<sup>\*21</sup> Except when a drive unit such as an optical drive is running. If the SSD and HDD are used in a mixed configuration, the vibration specification will be the same as for HDD configuration (2.0 m/s2 or less (0.2G or less)).

<sup>\*22</sup> The allowable momentary power interruption time of 20 ms is achieved when power consumption is 413 W/430 VA.