

# ITA-5710

## Intel® Atom™ D525 Fanless Compact System with EN 50155 Certification for Railway Applications



### Features

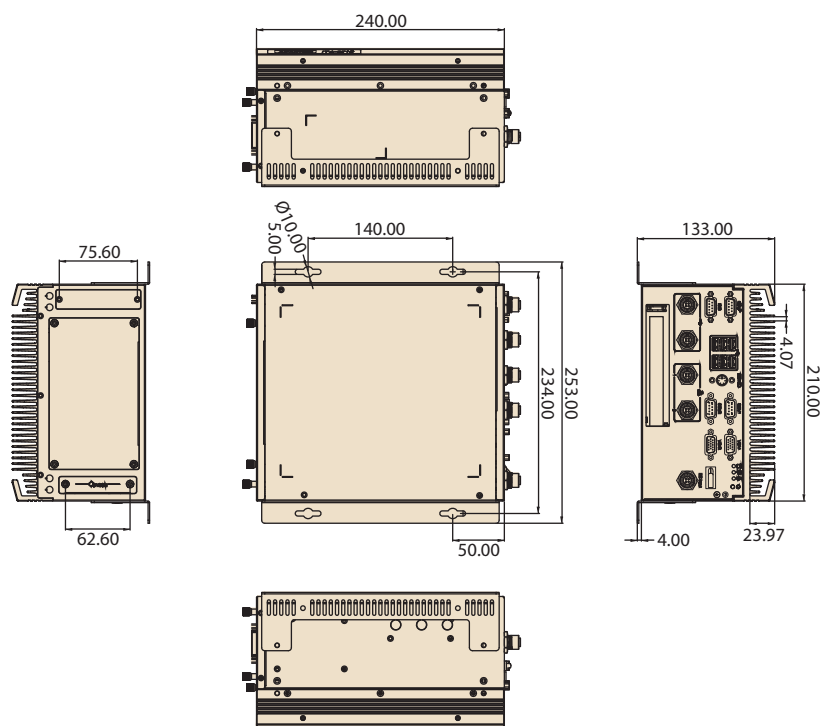
- Fanless compact Intel® Atom™ D525 processor
- Satisfies EN 50155 TX temperature requirements (-40 ~70 °C), IEC 61373 body mount class B specifications, and EN 50121-3-2 EMC standards
- Ruggedized connectors (m12) for communication and power ports
- Supports easy swap HDD/SSD/CF modules
- Optional PCI/Mini PCIe slots for expansion
- Compliant with EN50155 standards for railway applications

### Specifications

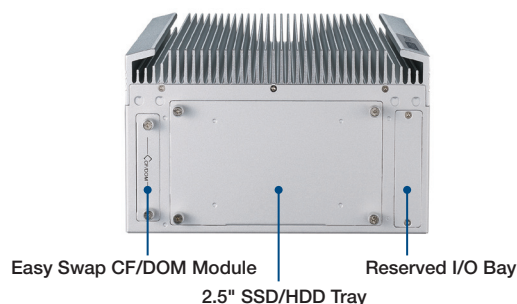
|                          |                              |                                                                                       |               |
|--------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------|
| System Chipset           | CPU                          | Intel® Atom™ D525 processor                                                           |               |
|                          | Max. Speed                   | 1.8 GHz                                                                               |               |
|                          | L2 Cache                     | 1 MB                                                                                  |               |
|                          | Chipset                      | Intel® ICH8-M                                                                         |               |
|                          | BIOS                         | AMI® SPI 16 Mb                                                                        |               |
| Memory                   | Technology                   | Single-channel DDR3 800                                                               |               |
|                          | Max. Capacity                | Onboard 2GB                                                                           |               |
| Display                  | Chipset                      | Embedded Gen3.5+ GFX Core, 400 MHz frequency                                          |               |
|                          | VRAM                         | Shared system memory up to 256 MB SDRAM                                               |               |
|                          | Dual Display                 | 2 x VGA or VGA + LVDS (optional)                                                      |               |
|                          |                              | Single channel maximum: 2048 x 1536 @ 60Hz<br>Dual channel maximum: 1366 x 768 @ 60Hz |               |
| Ethernet                 | LVDS                         | Supports 18-bit single channel up to 1366 x 768 @ 60 Hz (optional)                    |               |
|                          | Controller                   | Intel® i210-IT                                                                        |               |
|                          | Interface                    | 10/100/1000 Mbps                                                                      |               |
|                          | Connector                    | 2 x M12 A-coded (F), 8 pin                                                            |               |
| Storage                  | HDD/SSD                      | 1 x Easy swap 2.5" SSD/HDD bay                                                        |               |
|                          | Others                       | 1 x CompactFlash socket for Type I/II CompactFlash disk on motherboard                |               |
|                          |                              | 1 x Easy swap CF/SATA DOM module                                                      |               |
| I/O                      | USB                          | 2 x USB 2.0 with M12 A-coded (F), 4 pin<br>6 x USB 2.0 with Type A                    |               |
|                          | Serial Port                  | 2 x DB9, RS-232/422/485, supports auto flow control                                   |               |
|                          | DIO                          | 1 x DB9, 8 bit                                                                        |               |
|                          | VGA                          | 2 x DB15                                                                              |               |
|                          | Audio                        | 1 x DB9, 1 x speaker out with 2 x 4W amplifiers, 1 x mic in                           |               |
|                          | PS2                          | 1 x PS2                                                                               |               |
| Expansion Slots          | Mini PCIe                    | 1 x Mini PCIe (full size)<br>1 x Mini PCIe (full/half size)                           |               |
|                          | PCI                          | 1 x PCI 32 33 Mhz                                                                     |               |
| LEDs and Control Buttons | LED                          | 1 x Power, 1 x Storage, 1 x Alert LEDs                                                |               |
|                          | Button                       | 1 x Power on/off switch<br>1 x Reset button                                           |               |
| Power                    | Input Voltage                | 24 V DC, compliant with EN 50155, class S2/C1 (optional 48/72/110 V DC)               |               |
|                          | Connector                    | 1 x M12 A-coded (M), 4 pin                                                            |               |
| Watchdog Timer           | Output                       | System reset                                                                          |               |
|                          | Interval                     | Programmable 1 ~ 255 sec/min                                                          |               |
| Environment              | Temperature                  | Operating (with industrial SSD/CF)                                                    | Non-Operating |
|                          |                              | -40 ~ 70 °C                                                                           | -40 ~ 85 °C   |
| Mechanical               | Humidity                     | 5 ~ 95% @ 40 °C                                                                       |               |
|                          | Dimensions (W x H x D)       | 210 x 129 x 240 mm<br>253 x 133 x 240 mm (with supporting angles)                     |               |
| Certification            | Installation                 | Desktop/wall mount                                                                    |               |
|                          | EMC                          | CE/FCC Class A, CCC                                                                   |               |
| EN 50155 Compliance      | Safety                       | UL, CB, CCC                                                                           |               |
|                          | Ambient Temperature          | EN 50155 TX (-40 ~ 70 °C)                                                             |               |
|                          | Shock and Vibration          | IEC 61373 body mount class B                                                          |               |
|                          | Voltage Supply Interruptions | Class S2                                                                              |               |
|                          | Supply Change Over           | Class C1                                                                              |               |
|                          | EMC                          | EN 50121-3-2                                                                          |               |

## Dimensions

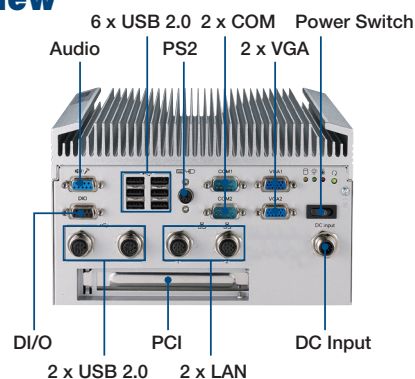
Unit: mm



## Front View



## Rear View



## Ordering Information

| Part Number    | CPU       | Onboard Memory | Ethernet (M12 A-coded, 8-pin, female) | USB (M12 A-coded, 4-pin, female) | Power Input (M12 A-coded, 4-pin, male) | Mini PCIe | COM (DB9) | 2.5" SSD Tray | CF/DOM Tray | Input Power        |
|----------------|-----------|----------------|---------------------------------------|----------------------------------|----------------------------------------|-----------|-----------|---------------|-------------|--------------------|
| ITA-5710-00A1E | Atom D525 | 2G DDR3        | 2                                     | 2                                | 1                                      | 2         | 2         | 1             | 2           | 24 V <sub>DC</sub> |

## Optional Accessories

### M12 Connector (Must purchase separately)

| Part Number | Description                                 |
|-------------|---------------------------------------------|
| Y5A5730000  | M12 A-coded, 4-pin, female, for power input |
| Y5A5730001  | M12 A-coded, 8-pin, male, for LAN           |
| Y5A5730002  | M12 A-coded, 4-pin, male, for USB           |

### M12 Cable (Must purchase separately)

| Part Number   | Description                                                          |
|---------------|----------------------------------------------------------------------|
| 1700022203-01 | Power cable, A-coded, 4-pin female to 2-pin European terminal, 10 cm |
| 1700023142-01 | USB cable, A-coded, 8-pin, male to standard port (Type A), 10 cm     |
| 1700022205-01 | LAN cable, A-coded, 4-pin male to RJ45, 10 cm                        |