

ARS-2510

EN50155 Intel® Core™ i7 Fanless Box PC



Features

- 3rd Generation Intel® Core™ i7 3517UE Processor
- Dual Independent Display: VGA and DVI-D
- M12 Connector for Ethernet and USB Interfaces
- MiniPCIe Expansions, Wi-Fi, 3G/LTE, GSM-R and GPS
- RAID 0/1 Support (Expansion Slots)
- EN50155 Certified:
Power Input Range Covers 24V/48V/72V/110V (±40%)
T3 Temperature Level: -25°C~70°C (85°C for 10 minutes) with EN45545 Compliant
- EN50121 EMC Standards
- IEC61373 Body Mount Class B
- IP50 Rating

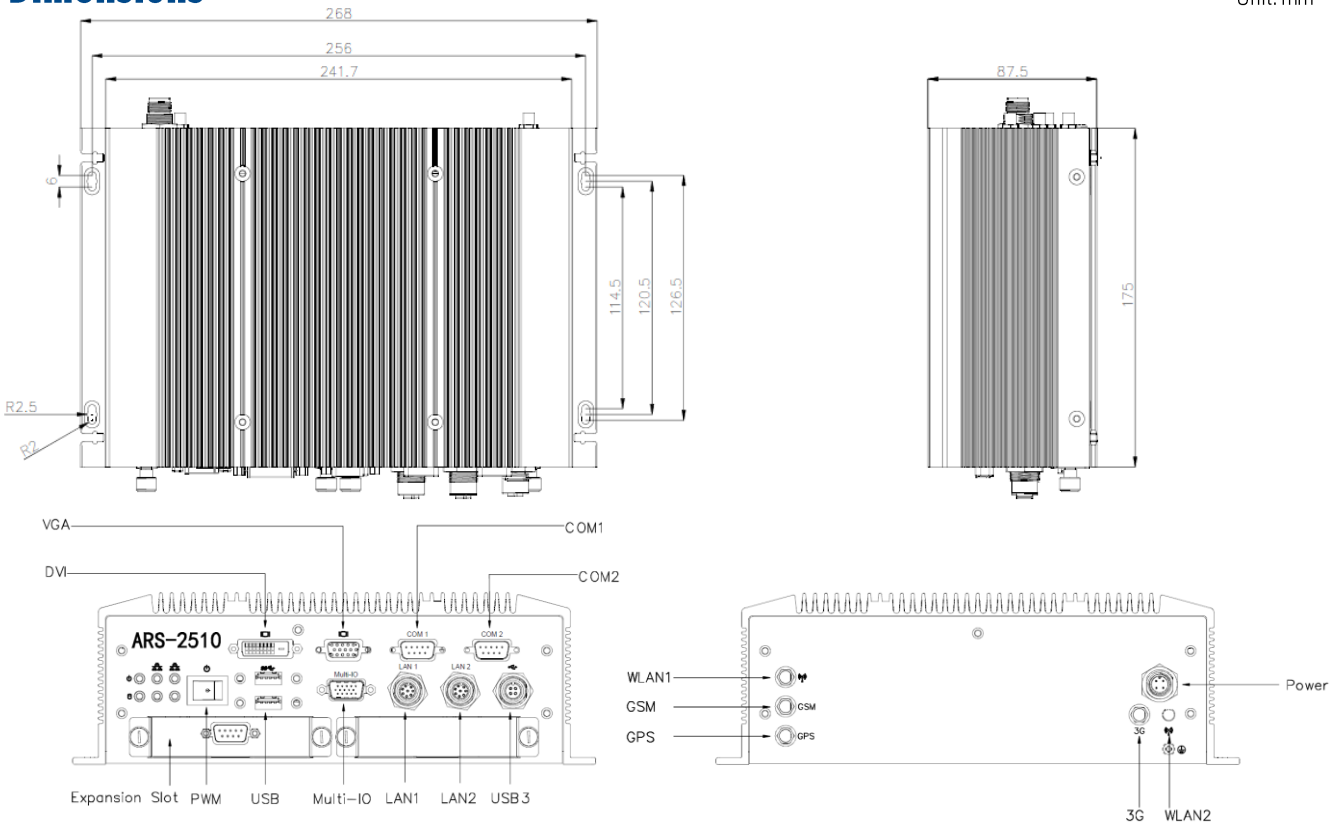
Specification

Computing System	CPU	Intel® ULV Core™ i7 3517UE
	Max Speed	Dual Core 1.7GHz (max 2.8GHz with Turbo Frequency)
	L3 Cache	4 MB
	System Chipset	Intel® QM77
	BIOS	AMI EFI 64Mbit
	Memory	DDR3 1600MHz, DDR3L 1333MHz 204-pin SODIMM (up to 8GB)
Storage	Internal	mSATA Socket x 1, CFAST Socket x 1
Graphics	Chipset	Intel QM77 Integrated GFX Gen 7
	Graphic Engine	DirectX 11, OpenGL 3.1, Open CL 1.1
	Video Resolutions	VGA up to 2048 x 1536 @ 75Hz, DVI up to 1920 x 1080
	Dual Display	VGA + DVI
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM Ethernet Controller (M12 connector)
	LAN2	10/100/1000 Mbps Intel 82583V Ethernet Controller (M12 connector)
Expansion Function	GPS	50 channels with -160dBm Sensitivity, A-GPS and Galileo Capable (Optional)
	Wi-Fi	Atheros AR9382 802.11 a/b/g/n (Optional)*
	WWAN	HSPA Tri-Band and GSM Quad-band, up to 7.2Mbps downlink (Optional)*
	GSM-R/ GPRS-R	Quad-band, GPRS Multi-Slot Class 10, GSM Phase2/ Phase2+ (Optional)
	G-Sensor	Digital Accelerometer Ultra Low Power, 10-bit Resolution
	Gyroscope	Turn Rate Sensor for Dead Reckoning (SPEED+ and FWD+ Signals on DB15 Connector)
Audio	Interface	Realtek ACL892, High Definition Audio, Line-out, Mic-in, Line-in
I/O Interface	Serial Port	RS-232/422/485 Ports with Auto Flow Control x 2
	USB Interface	USB 3.0 x 2 (Type A x 2), USB 2.0 x 1 (M12 x 1)
Expansion I/O	Optional Module	CAN Bus, Isolated Serial Port, Isolated Digital I/Os, Expansion Module for 2 x 2.5" SSD Driver Bay
Software	Microsoft	Windows 7, Windows 7 Embedded
	Linux	2.6.xx
	API	Advantech SUSIAccess
	Intel iAMT	V8.0
Power	Connector	M12 with 4 Poles
	Power Input Voltage	24Vdc, 48Vdc, 72Vdc, 110Vdc (±40%) (Optional)
Physical Characteristics	Construction	Aluminum Housing
	Dimensions (W x H x D)	268 x 87.5 x 175 mm
	Weight	4.25kg ± 0.5kg
Environment	Operating Temperature	EN50155 T3: -25~70°C (85°C for 10 Minutes)
	Storage Temperature	-40 ~ 85°C
	Relative Humidity	95% @ 40°C (Non-Condensing)
Certifications	Vibration/Shock	MIL-STD-810G, EN50155
	Railway Related	EN50155, EN50121, IEC61373, EN45545
	EMC	CE/FCC Class A
	Safety Certification	UL
Other	Watchdog Timer	255 Levels Timer Interval (Setup by Software)

*Any module with mini PCIe interface can be integrated if either default Wi-Fi or WWAN function is not necessary.

Dimensions

Unit: mm



Ordering Information

Voltages	Part Number	Processor	DDR3L 4G	mSATA 32G	VGA	DVI	Dual LAN	Dual COM	Dual USB	Audio	GSM-R	3G	Wi-Fi	GPS
24V	ARS-2510T3-10A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V	V	V	V	V
	ARS-2511T3-10A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V		V	V	V
	ARS-2512T3-10A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V				
48V	ARS-2510T3-20A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V	V	V	V	V
	ARS-2511T3-20A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V		V	V	V
	ARS-2512T3-20A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V				
72V	ARS-2510T3-30A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V	V	V	V	V
	ARS-2511T3-30A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V		V	V	V
	ARS-2512T3-30A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V				
110V	ARS-2510T3-40A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V	V	V	V	V
	ARS-2511T3-40A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V		V	V	V
	ARS-2512T3-40A1E	Intel® i7-3517UE	V	V	V	V	V	V	V	V				

Optional Modules

Part Number	Product Description
AIO-SSD110-00A1E	Single SSD carrier with DIO for ARS-2510/ARS-2110
AIO-COM210-00A1E	Dual COM ports with isolation for ARS-2510/ARS-2110
AIO-CAN210-00A1E	Dual CAN ports with Isolation for ARS-2510/ARS-2110

Advantech provides customization services for expansion modules with desired I/O.

- For sales inquiries or further information, please contact us at Rail@Advantech.com.tw