

MARS-3100S

10.4" Semi-rugged Industrial Tablet PC



Features

- Rugged design protects system from shock/vibration damage
- IP54-rated, fully-sealed chassis for water/dust resistance
- Powerful communication capabilities with optional built-in WLAN, Bluetooth and GSM/GPRS/EDGE modules
- Flexible I/O design for customization requirements
- Supports Windows® XP Embedded for easy development
- Fanless design

Introduction

The Advantech MARS-3100S series is a 10.4" Semi-rugged Industrial Tablet PC for applications such as manufacturing, warehousing, factory maintenance, field service, transportation, as well as police, fire, or other emergency services. The rugged design of the MARS-3100S resists shock and vibration to safeguard data while on the move. The whole MARS-3100S chassis is fully sealed to IP54 ratings to prevent water and dust damage in outdoor applications. In addition, the optional built-in WLAN, Bluetooth and GSM/GPRS/EDGE modules facilitate data transfer and communication.

Low Power Consumption

The MARS-3100S uses an AMD LX800 500 MHz processor, making it the most power-efficient model of the MARS-3100 series. This enables the MARS-3100S to be fanless and consume less than 15 W of power.

Cost Competition

The fanless and power-efficient design of the MARS-3100S makes it ideal for light-duty industrial applications. The MARS-3100S is a semi-rugged tablet PC that has the same strong chassis as the MARS-3100R, at a lower cost.

Wireless Communication

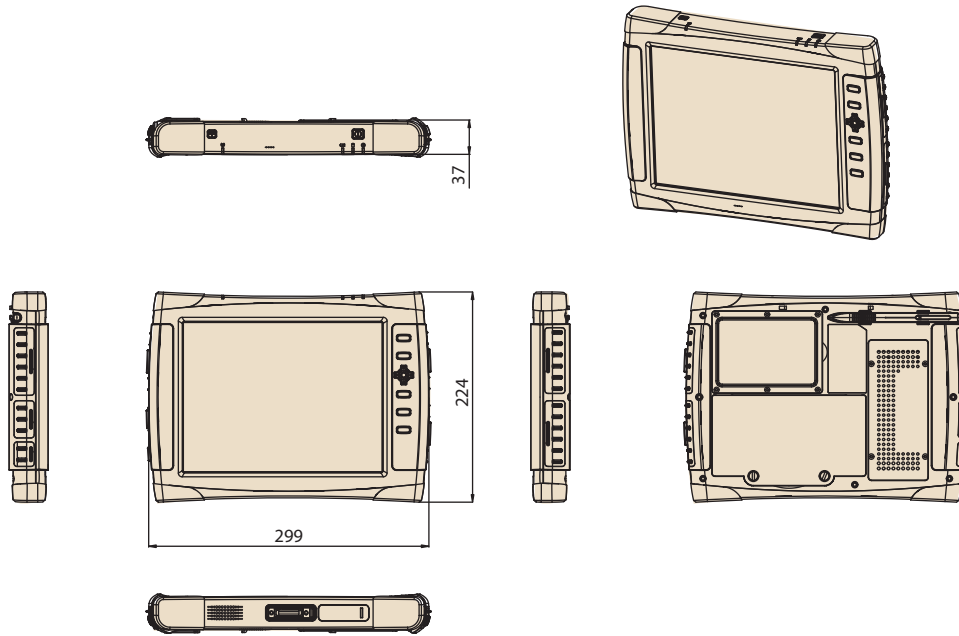
For people on the move, MARS-3100S provides optional built-in GSM/GPRS/EDGE WAN, 802.11a/b/g LAN and Bluetooth PAN connectivity for complete wireless communication capabilities. All options come with a built-in internal antenna, so users can easily access remote databases or exchange information with others no matter where they are.

Specifications

Processor System	Processor	AMD LX800 500 MHz	
	Chipset	AMD CS5536	
	Graphic	AMD CS5536 with shared memory	
	Memory	- 512 MB DDR 400 MHz memory module in one 200-pin SODIMM slot	
	Storage	- Default 4 GB CF - Optional 2.5" shock mounted HDD	
OS	Supports Windows XP Embedded		
Display	Panel	10.4" SVGA TFT LCD	
Communication	Wireless	Wireless LAN 802.11a/b/g (Default) (only Band 1 and Band 4)	
	WAN	GSM/GPRS/EDGE (Optional)	
	Bluetooth	Bluetooth V2.0/EDR (Optional)	
User Control Interface	Resistive touch screen		Screen rotation key Power button WLAN ON/OFF button
	5-way navigation key 3 x application hotkeys (programmable) Logon button		
I/O Interface	RS-232	1 x 9-pin D-sub RS-232	
	USB	1 x USB 2.0	
	LAN	1 x 10/100Base-T, RJ-45	
	VGA Out	1 x 15-pin D-sub VGA output	
	Audio	1 x Microphone jack 1 x Headset jack	
Power	Adapter	Auto-switching 100 ~ 240 V, 50 ~ 60 Hz supplying 19 V _{DC} @ 3.16 A	
	Battery	Warm-swappable 11.1 V @ 3600 mAh Li-ion battery pack	
	Battery Life	3.5~4 hours	
	Charging Time	2.5 hours to 90%	

Dimensions

Unit: mm



Specifications

Mechanical	Dimensions	229 x 224 x 37 mm (9.02" x 8.82" x 1.46")	
	Weight	2.1 kg (4.63 lb)	
Environment	Operation Humidity	0% ~ 95% non-condensing MIL-STD810F Method 507.4	
	Storage Humidity	0% ~ 95% non-condensing MIL-STD810F Method 507.4	
	Operation Temperature	0 ~ 50° C MIL-STD 810F Methods 501.4 and 502.4 Procedure II	
	Storage Temperature	-20 ~ 60° C MIL-STD 810F Methods 501.4 and 502.4 Procedure I	
	Thermal Shock	1.5 ~ 5° C / minute over 0 ~ 50° C MIL-STD810F-503.4	
	Water/Dust Resistance	IP54 equivalent	
	Drop	3 ft free drop to steel during operating. MIL-STD-810F, Method 516.5 Procedure IV	
	Vibration	Operation: MIL-STD 810F Methods 514.5C-1 for HDD and MIL-STD 810F Methods 514.5C-3 for CF Non-Operation: 0.04g ² /Hz, 20Hz - 1000Hz, -6dB/octave 1000Hz-2000Hz, MIL-STD-810F method 514.5C-17	
	Mechanical Shock	Operating: 20g, 11ms, Terminal sawtooth, Non-operating: 40g, 11ms, Terminal sawtooth, MIL-STD-810F method 516.5	
	Low Pressure	15,000 ft. In accordance with MIL-STD810F method 500.4 Procedure I	
Certifications and Standards	Certifications	FCC, CE, UL/cUL, CB	
	EMC	- EN55022 Class B - EN55011 Class A	- FCC Part15 Class B - DOC Class B
	EMS	- Contact: 4Kv/ Air: 8Kv, EN55024	
	Safety	- UL/cUL, UL60950-1 - CB, IEC/EN60950-1	
	RF	- CE-R&TTE EN301489-1/-17 and EN 300328	
		- CE SAR test EN50385 - CE CAB report	

Ordering Information

Part No.	Description
MARS-3100S-1B1100E	MARS-3100S basic model, 4GB CF, 512MB DDR, 802.11 a/b/g, with XPE (Eng.)
MARS-3100S-1B1600E	MARS-3100S basic model, 4GB CF, 512MB DDR, 802.11 a/b/g, GPRS with XPE (Eng.)
MARS-3100S-1B1700E	MARS-3100S basic model, 4GB CF, 512MB DDR, 802.11 a/b/g, EDGE with XPE (Eng.)

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- Embedded SBCs 2
- Industrial Motherboards 3
- Compact Embedded Computers 4
- Pre-Configured Systems 5
- Full-Size Slot SBCs 6
- Industrial Computer Chassis 7
- Performance Computing Systems 8
- Industrial Computer Peripherals 9
- Panel PCs 10
- Display Solutions 11
- Digital Video Solutions 12
- Vehicle Mounted Computers 13
- Portable Computers 14
- M2M Modules 15
- Embedded Software Services 16