

# 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 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 semi-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 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

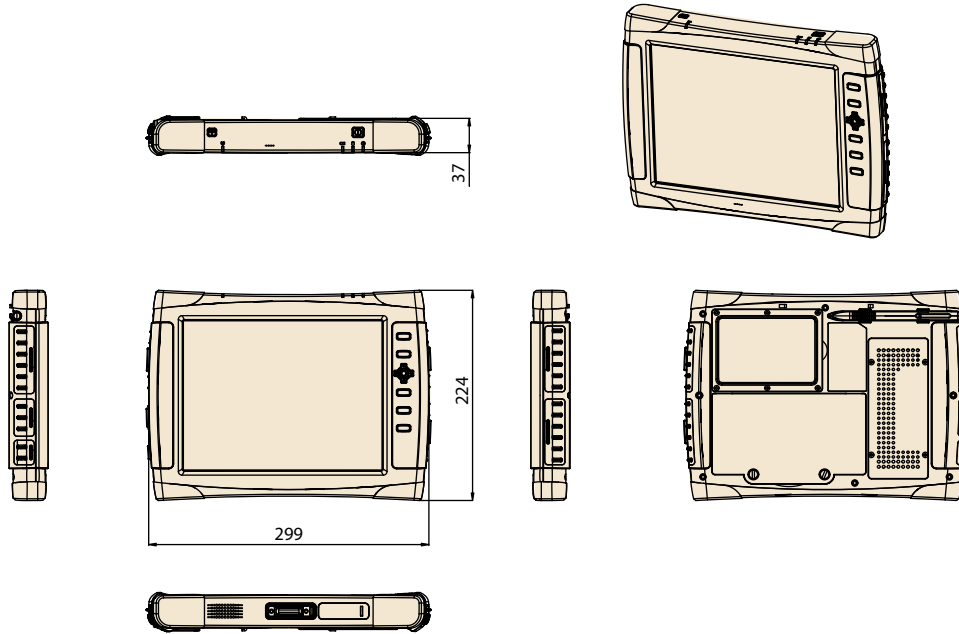
For people on the move, MARS-3100S provides optional built-in GSM/GPRS WAN, 802.11a/b/g LAN and Bluetooth PAN connectivity for complete wireless communication capabilities. All options come with a built-in internal antenna, so users can easily access remote databases or exchange information with others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

### Specifications

Processor System	Processor	AMD LX800 500 MHz	
	Chipset	AMD CS5536	
	Graphics	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	
Graphics	Panel	10.4" SVGA TFT LCD	
Communication	Wireless	Wireless LAN 802.11a/b/g (Default) (only Band 1 and Band 4)	
	WAN	GSM/GPRS (Optional)	
	Bluetooth	Bluetooth V2.0/EDR (Optional)	
User Control Interface		Resistive touchscreen 5-way navigation key 3 x application hotkeys (programmable) SAS button	Screen rotation key Power button WLAN ON/OFF button
I/O Interface	RS-232	1 x 9-pin D-sub RS-232	
	USB	1 x USB 2.0 port	
	LAN	1 x 10/100 Mbps, RJ-45 jack	
	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 <sub>DC</sub> @ 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 Cont.**

Mechanical	Dimensions	299 x 224 x 37 mm (11.77" x 8.82" x 1.46")	
	Weight	2.1 kg (4.63 lb)	
Environment	Operating Humidity	0% ~ 95% non-condensing MIL-STD810F Method 507.4	
	Storage Humidity	0% ~ 95% non-condensing MIL-STD810F Method 507.4	
	Operating Temperature	0 ~ 50° C MIL-STD 810F Methods 501.4 and 502.4 Procedure II (0 ~ 40° C for better charging)	
	Storage Temperature	-40 ~ 60° C MIL-STD 810F Methods 501.4 and 502.4 Procedure I	
	Water/Dust Resistance	IP54 equivalent	
	Drop	3 ft free drop to steel during operation. 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 <sup>2</sup> /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		
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, 4 GB CF, 512 MB DDR, 802.11 a/b/g, with XPE (Eng.)
MARS-3100S-1B1600E	MARS-3100S basic model, 4 GB CF, 512 MB DDR, 802.11 a/b/g, GPRS with XPE (Eng.)