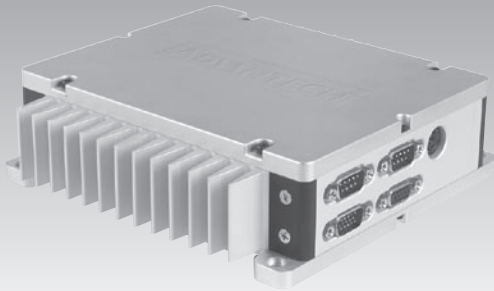


ARK-4153

Modular and Stackable system, AMD® Geode™ LX800 processor, -40 ~ 75° C, Fanless, Anti-vibration and Shock Resistant, Embedded Box Computer

NEW



Features

- AMD® Geode™ LX800
- Four serial ports and four USB 2.0 ports
- VGA, Dual LAN, LPT and KB/MS ports
- Embedded 128MB/1GB onboard Flash and 256 MB Industrial DDR SDRAM
- Embedded Windows CE solution
- Ultra small size, robust construction with fanless operation
- Modularized and Stackable design
- Anti-vibration and shock-resistant
- Dust and fungus resistant
- Customization service

Introduction

Advantech's ARK stackable System PC/104-base box computers feature industrial grade components that have passed extra strict testing and quality assurance for higher reliability and longer operating life. Many industrial applications demand high shock/vibration resistance and an extended range of temperature endurance for computers that must operate in inhospitable and remote environments. The ARK Stackable System combines all these crucial capacities in space efficient, modular aluminum enclosures. Advantech's stackable enclosures are the most versatile and rugged solution on the market today.

The ARK-4153 is an all-in-one industrial computer with AMD LX800 processor, supporting up to four USB 2.0, three RS-232 and one RS-485, line-in, line-out, dual LAN and VGA functions. The ARK stackable series is ultra compact and suitable for a great variety of critical applications. It offers superior resistance against harsh environments that generate dust and moisture. The ARK-4153 is equipped with an embedded CPU board designed with ruggedly mounted onboard components. The whole system is designed expressly to withstand environments in which shock and vibration are everyday events.

Specifications

Processor Core Logic System

- **CPU** Embedded AMD Geode LX800
- **System Chipset** AMD Geode LX800
- **BIOS** Award 4 Mbit Flash BIOS
- **System Memory** Onboard 256MB

Display

- AMD Geode. LX800
- Supports CRT Display with external VGA connector
- Supports 18/36-bit TTL LCD display (internal pinhead)

Audio

- AC'97 2.0 compliant. Supports Line-in, Line-out

Ethernet

- **Ethernet Controller** Intel 82551ER 10/100Base-T Ethernet Controller with 2 x RJ45 connector

Serial ports

- **USB Interface** 4 x USB 2.0 ports
- **COM Interface** 3 x RS-232 ports and 1 RS-485 port

Other

- **WatchDog Timer** 255-level timer interval, set up by software
- **Keyboard/Mouse** Support PS/2 mouse and PS/2 keyboard

Software Support

- Embedded Windows CE 5.0

Environmental

- **Operation Temperature** -40° C ~ 75° C
- **Vibration During Operation** 7 Grms, 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis
- **Shock During Operation** 70 G, IEC 60068-2-27, half sine, 11ms duration
- **Certification** CE, FCC, UL

Mechanical

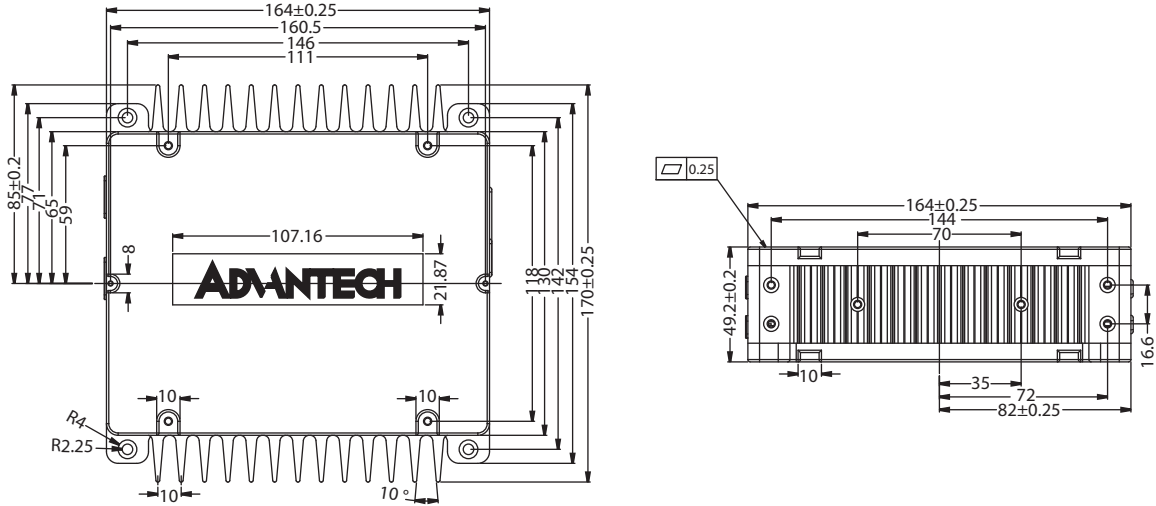
- **Construction** Aluminum housing
- **Mounting** Wall-mounting
- **Dimension** 164 mm x 170 mm x 49.2 mm
- **Weight** 2 kg

Power

- **Power Supply Voltage** AT, +5 V ± 5%, +12 V ± 5% (Optional) (5V only, 12V optional for PC104 add on card and LCD inverter)
- **Power Consumption (Geode LX800, 256 MB DDR333)**
Max: +5 V @ 7 A, +12 V @ 0.5 A

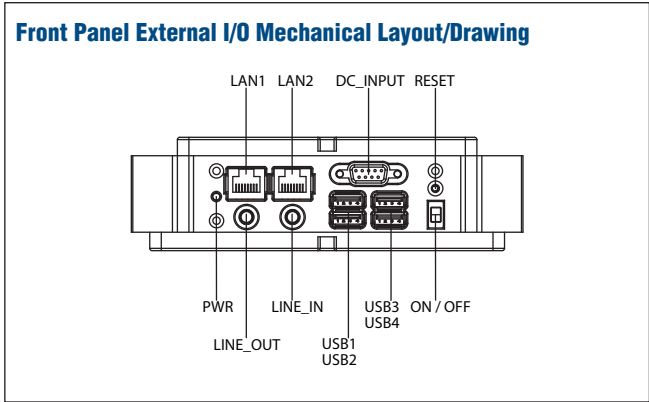
Dimensions

Unit: mm



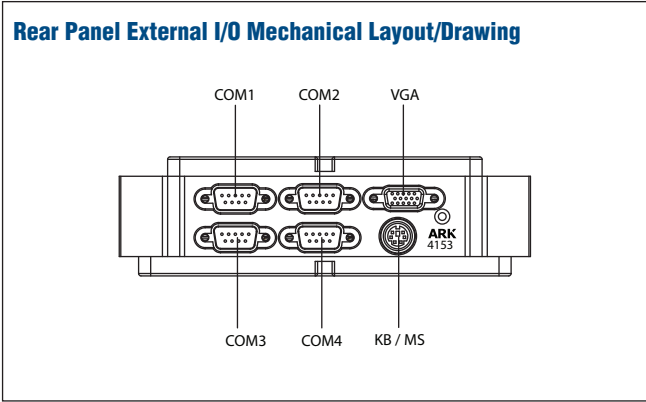
Front Panel External I/O

- 2 x RJ-45 Ethernet port
- 4 x USB 2.0 connector
- 1 x DC input connector
- 1 x Parallel port
- 1 x Power On/Off switch
- 1 x Reset Button
- 1 x Power LED light
- 1 x line-in connector
- 1 x line-out connector



Rear Panel External I/O

- 3 x RS-232 Serial Interfaces
- 1 x RS-485 Interface
- 1 x VGA/CRT Connector
- 1 x PS/2 Connector for PS/2 Keyboard and Mouse



Packing List

- 1 x ARK-4153 Unit
- 1 x PS/2 Keyboard/Mouse Cable
- 1 x AT power cable
- 1 x Utility CD
- 1 x Startup Guide

Ordering Information

Part No.	CPU	CRT	10/100	USB2.0	RS-232	RS-485	LPT	KB/MS	Audio	Onboard Flash	Memory	Operation Temp.	Embedded OS
ARK-4153Y-AL0A1E	AMD LX800	Yes	2	4	3	1	Yes	--	Yes	Industrial grade 128MB	Industrial grade 256 MB	-40 ~ 75° C	Windows CE
ARK-4153Y-BL0A1E	AMD LX800	Yes	2	4	3	1	Yes	--	Yes	Industrial grade 1GB	Industrial grade 256 MB	-40 ~ 75° C	Windows CE