Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

WISE-3310

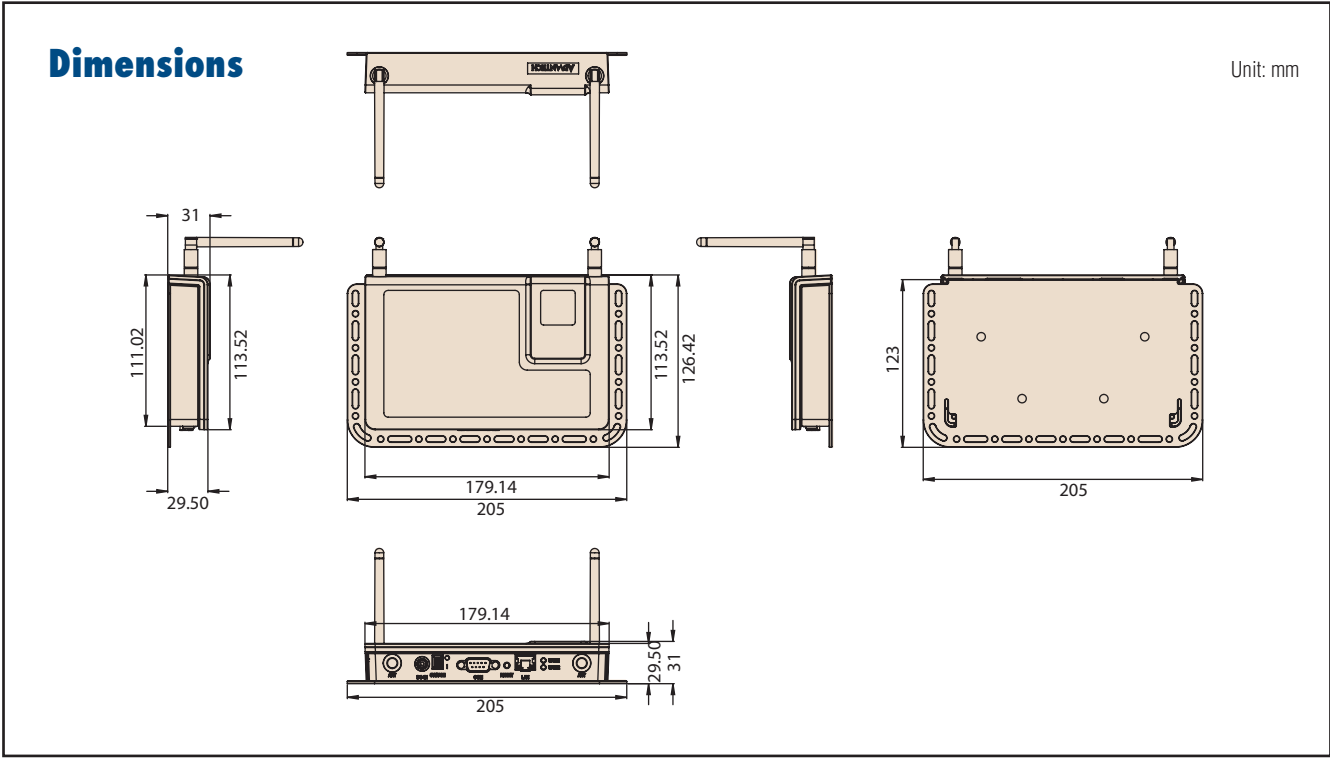## Wireless IoT Mesh Network Gateway

Features

- All-in-One RISC-based Intelligent and Industrial platform with Freescale i.MX6 Dual Cortex-A9 1.0 GHz processor
- 99.999% reliability WSN MESH network
- Linux 3.10.17 BSP embedded
- Compliant to 6LoWPAN and IEEE 802.15.4e standards
- Support 200/100 wireless nodes (by different SKU)
- Power saving mode and fanless design
- Web UI user interface

WISE-PaaS/RMM   CE   FCC   RoHS COMPLIANT 2002/95/EC

Introduction

Advantech RISC-based WPAN Network Controller, WISE-3310, is powered by the Freescale i.MX6 Dual Cortex-A9 1.0 GHz processor, Linux 3.10.17 BSP and Linear Dust LTC5800 Cortex M3 MCU. With changeable embedded modules and feature-rich protocol, WISE-3310 creates a cost-effective open platform for easy integration and development in different M2M/IoT applications. Connect with Advantech WPAN sensor nodes, by Smartmesh IP protocol for applications in wireless sensor networks where seamless internet protocol (IP) is valued. Also, WISE-3310 provide the WISE-Agent to connect with WISE-PaaS which provide the IoT Software platform for streamline IoT application development.

Specifications

Processor System	CPU	Freescale ARM Cortex-A9 i.MX6 Dual 1 GHz
Memory	Technology	DDR3 1066 MHz
	Capacity	On-board DDR3 1GB
	Flash	4GB eMMC NAND Flash for OS. And 4MB SPI NOR Flash for Advantech boot loader
Ethernet	Chipset	Freescale i.MX6 integrated RGMII
	Speed	1, 10/100/1000 Mbps
	PoE	-
WSN	Standard	Complaint 6LoWPAN and IEEE802.15.4e
	Frequency Band	2.400 ~ 2.4800 GHz
	Number of Channels	15
	Channel Separation	5 MHz
	Raw Data Rate	250 Kbps
	Output Power	Hight setting: 8 dBm/ Low setting: 0 dBm
Wireless	WiFi	IEEE802.11bgn (option)
	Cellular	-
Graphics	HDMI	-
	VGA	-
RTC	RTC	Yes
Watchdog Timer	WDT	Yes
Indicator and Button	USB	-
	Audio	-
	GPIO	-
	CANBus	-
	I²C	-
	LED	2 for WSN status, 1 Yellow LED for WSN1 and 1 Green LED for WSN2
	Button	1 reset button for system reboot
	Serial Port	1 x RS-232 (CTS, RTX,Tx,Rx)
	Switch	1 Power Switch
	Mini PCIe Socket	1 half-size Mini PCIe slot
	SD Socket	1 x SD slot
Expansion	Antenna hole (SMA)	2 for 200-node SKU, 3 for 100-node SKU; 4 antenna holes totally
	SIM	-
Power	DC-input	DC 9~ 24V
	Power Type	DC-in
	Power Consumption	3.96W (Max)
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F)
	Operating Humidity	5% ~ 95% Relative Humidity, non-condensing
Mechanical	Dimensions(L x W x H)	205 x 126 x 31 mm with a metal plate 180 x 114 x 31 mm without a metal plate
	Mounting	Metal bracket wall mount
	Weight	312g
Operating System	Linux	V3.10.17
Certifications		CE/FCC Class B, TELEC, KCC, NCC

Dimensions

Unit: mm

Software Key Features

Completed Software Services
- BSP and image
- SDK
- WSN API
- Device management API (SUSI /SUSI IoT API)
- WISE-Agent

Easy-use from sensor to cloud
- WSN Mesh self-forming
- Web UI setting for WSN and Cloud
- WSN API with CoAP protocol
- WISE-Agent connect to WISE-PaaS/RMM

Ordering Information

Model Name	Description
WISE-3310-D200L1E	WISE-3310 WPAN GW, 200-Node, Linux OS
WISE-3310-D100L1E	WISE-3310 WPAN GW, 100-Node, Linux OS

Related Models

Model Name	Description
WISE-1020-0C01E	Wireless IoT Node with on-board Chip-antenna
WISE-1020-0S01E	Wireless IoT Node with external SMA Antenna
WISE-1021WR-1100E	Wireless IoT Node with TI MSP430 MCU

Packing List

Part No.	Description	Quantity
96PSA-A36W12R1	ADP A/D 100-240V 36W 12V	1
1750007622-01	Antenna 2.4Ghz 3.5dBi SMA Male Reverse	2 (for WISE-3310-D200L1E) 1 (for WISE-3310-D100L1E)