# **WISE-3620**

## **Wireless IoT WiFi Network Gateway**



#### **Features**

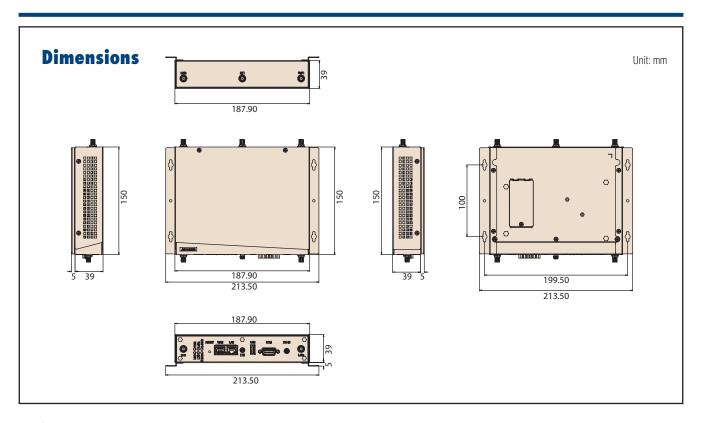
- Qualcomm Atheros Quard-Core ARM Cortex-A7 SoC
- Built-in Dual Band Concurrent Wi-Fi MU-MIMO (2x2)
- WAN x1 / LAN x1 Gigabit Ethernet
- Integration of Modbus TCP and Modbus RTU networks
- IPSec / L2TP VPN Traffic Encryption
- Rich Network Scanrio by S/W Configuration
- Modularization hardware design
- OpenWRT BSP embeded
- Web UI user interface

### Introduction

WISE-3620 is Qualcomm ARM Cortex A based hardware platform, which is operating at OpenWRT, described as a Linux distribution for embedded devices. The Advantech WISE-3620 Industrial Router is Advantech IoT gateway design for smart city, Industrial 4.0 applications, even those in harsh environment, leveraging wireless sensor technology. This IoT gateway can aggregate both the wireless sensor networks (WSN), including 802.11AC MU-MIMO Technology, wired sensors and ties them into an IP network. With modular slot design, it can agilely adapt to a variety of wireless technologies at regional RF bands, wireless communication protocol by various uplink requirement and quickly go to market.

## **Specifications**

C	CPU	QCA Quad-core ARM Cortex A7 CPU 716 MHz		
Processor System R	RAM	DDR3L 256MB		
F	lash	128MB		
Ethernet	VAN	1 10/100/1000 Mbps		
L	AN	1 10/100/1000 Mbps		
Security	/PN Engine	IPsec, L2TP		
Connectivity	Vi-Fi	2x2 IEEE802.11ac MU-MIMO 2.4GHz / 5GHz	Qualcomm <sup>®</sup> VIVE™ technology	
3	G/LTE (Option)	3G miniPCle card	3G Band Suport: B5, B8, B2, B1, B4	
S	SD socket	1 x Micro SD socket		
Expansion	nini PCle	1 x Full size mini PCle slot 1 x Full size mini PCle Module		
S	SIM	2 x Micro SIM slot		
U	JSB	1 x USB 3.0 type A		
S	Serial Port	1 x RS-232/422/485 (DB9 Male)	Configure by hardware switch on board	
I/O (Edge)	Antenna	6 x SMA Connector	Wi-Fi: 2 x RP-SMA Optional for 3G: 2 x SMA (1 x Rx Diversity)	
L	.ED	6 x PWR/Wi-Fi 2G/Wi-Fi 5G/USB/WWAN		
	Button	1 x Reset button		
P	Power Supply Voltage	9 - 24V		
	Power Type	DC-in		
P	Power Comsuption	18 Watt		
FUALCULATION	Operational Temperature	-20 ~ 70 degree C		
0	perating Humidity	5%~95% Relative Humidity, non-condensing		
	Dimensions (W x D x H)	187.9mm x 150mm x 39mm		
	OpenWRT Barrier Breaker (Linux (3.14))			
	L2/3 multilayer switch / router			
	Access Control List mask rules			
	Hardware network address translation (NAT) engine			
		esponding communication network support	Depend on different application environment for	
	- NorthBond: WWAN (3G), WAN, Wi-Fi (2.4Ghz or 5Ghz) - SouthBond: LAN, Wi-Fi (2.4Ghz or 5Ghz), LoRa			
	VISE-PaaS / RMM Cloud	or conz, cond		
	ELEC, CE/FCC/IC Class B, SRRC,	1/00 NO0		



# **Software Key Features**

#### **Completed Software Services**

- Modbus TCP and Modbus RTU networks
- Rich network scenario configuration
- Point-to-point VPN encryption engine
- Network routing path acceleration
- WISE-Agent

#### Easy-use from sensor to cloud

- Web UI setting for WSN, Gateway and Cloud
- IoT communication with MQTT protocol
- WISE-Agent connect to WISE-PaaS/RMM

# **Ordering Information**

Model Name	Description
WISE-3620	WISE-3620 802.11AC MU-MIMO WiFi Engineering Sample

## **Packing List**

Part No.	Description	Quantity
96PSA-A36W12R1	ADP A/D 100-240V 36W 12V	1
1750008001-01	Antenna 2.4Ghz / 5Ghz SMA Male Reverse	2

## **Related Models**

Model Name	Description
WISE-1520ITB-TDA1E	WISE-1520 M2.COM Wi-Fi module
WISE-1530ITB-SDA10	WISE-1530 M2.COM WIFI/BLE module

# **Optional Items**

Part No.	Description
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 180cm, Europe type
170203180A	Power Cable 3-pin 180cm, UK type
1700008921	Power Cable 3-pin PSE Mark 183cm
1750008424-01	3G/LTE Antenna Dipole 4dBi Full Band
1750008669-01	3G/LTE RX Diversity Antenna Cable IPEX to IPEX Connector
968EMW0093	Mini PCIE HSPA 3G Card with Rx Diversity