

IoT Wireless Sensor Nodes

WISE-4610 Series



	Industrial LoRa/LoRaWAN Wireless Module				Industrial LoRa/LoRaWAN Wireless Module				
Model Name	WISE-4610-NA	WISE-4610-EA	WISE-4610-JA	WISE4610JA2001-T	WISE-4610-NA	WISE-4610-EA	WISE-4610-JA	WISE4610JA2001-T	
Frequency Range	US 902~923 MHz	EU 863~870 MHz	AS 923~923.5 MHz	AS923-923.MHz	US 902~923 MHz	EU 863~870 MHz	AS 923~923.5 MHz	AS923-923.MHz	
Function	Wireless Board				Wireless Board				
Positioning	GPS/Galileo/BeiDou/GLONASS				NA				
Power Input	4100 mAh Lithium Rechargeable Battery				NA				
	10~50V _{DC} External Power				10~50V _{DC} External Power				
	17~21V _{DC} Solar Panel				17~21V _{DC} Solar Panel				
Configuration Interface	Micro-B USB				Micro-B USB				
I/O Module									
Model Name	WISE-S614-A	WISE-S614T-A	WISE-S615-A	WISE-S615T-A	WISE-S617-A	WISE-S617T-A	WISE-S600 / WISE-S600T	WISE-S235SL-A	
Spec	4AI&4DI (M12)	4AI&4DI (Terminal Block)	4RTD (M12)	4RTD (Terminal Block)	2AI, 2DI, 1DO&1RS-485 with 12V power output (M12)	2AI, 2DI, 1DO&1RS-485 with 12V power output (Terminal Block)	6DI, 1RS- 485 & 1RS- 485/ 232	Upon Customization Request *MOQ required	Stack Light Monitoring Sensor
WISE-4610 Optional	1654011516-01 M12, A-code, 8 Pin, Male 1655005903-01 M12, A-code, 4 Pin, Female 1700028162-01 M12, A-code, 4 pin, Female with 1M cable 1700028163-01 M12, A-code, 8 Pin, Male with 1M cable								

WISE-4220 Series



	WiFi 2.4G Wireless Module					Built-in Temperature & Humidity Sensor*
Model Name	WISE-4220-A					WISE-4220-S231A
Standard	802.11 b/g/n					
Frequency	2.4G					
Function	Wireless Board					
Power Input	10~50V _{DC} External Power					
Configuration Interface	Micro-B USB					
Outdoor Range (LOS)	100m					
I/O Module						*Modularization doesn't effect on WISE-4220-S231 series
Model Name	WISE-S214-A	WISE-S250-A	WISE-S251-A	WISE-S200-A	WISE-S235SL-A	
Spec	4AI&4DI	6DI, 2DO&1RS-485	6DI & 1RS-485	Stack Light Monitoring Sensor	Upon Customization Request *MOQ required	

- 1 IoT Software Solutions
- 2 Edge AI & SKY Server
- 3 Intelligent System
- 4 Machine Vision Solution
- 5 Intelligent HMI and Monitors
- 6 Automation Computers
- 7 DAO and Communication Gateway
- 8 Industrial Communication
- 9 Remote I/O, Wireless Sensing Modules & Converters
- 10 Intelligent Motion Control Solutions
- 11 Automation Controller and EtherCAT Solutions
- 12 Industrial I/O Solutions
- 13 Intelligent Transportation Platforms
- 14 Utility and Energy Solution

IoT Wireless Sensor Nodes

WISE-4671 Series



Advanced Industrial Cat.NB1/Cat.M1 Wireless Module									
Model Name	WISE-4671-UA								
Standard	3GPP Release13								
Band	B2,3,4,8,12,13,20,28								
SIM Type	Nano SIM/4FF								
Function	Wireless Board								
Positioning	GPS/Galileo/BeiDou/GLONASS								
Power Input	4100 mAh Lithium Rechargeable Battery 10~50V _{DC} External Power 17~21 V _{DC} Solar Panel								
Configuration Interface	Micro-B USB								
I/O Module									
Model Name	WISE-S614-A	WISE-S614T-A	WISE-S615-A	WISE-S615T-A	WISE-S617-A	WISE-S617T-A	WISE-S672-A	WISE-S600/ WISE-S600T	WISE-S235SL-A
Spec	4AI & 4DI (M12)	4AI & 4DI (Terminal Block)	4RTD (M12)	4RTD (Terminal Block)	2AI,2DI, 1DO & 1RS-485 (M12)	2AI,2DI, 1DO & 1RS-485 (Terminal Block)	6DI,1RS-485 & 1RS-485/232	Upon Customization Request *MOQ required	Stack Light Monitoring Sensor
WISE-4671 Optional	1654011516-01 M12, A-code, 8 Pin, Male 1655005903-01 M12, A-code, 4 Pin, Female 1700028162-01 M12, A-code, 4 pin, Female with 1M cable 1700028163-01 M12, A-code, 8 Pin, Male with 1M cable								

WISE-4471 Series



Industrial Cat.NB1/Cat.M1 Wireless Module						
Model Name	WISE-4471-UA					
Standard	3GPP Release 13					
Band	B2,3,4,5,8,12,13,20,28					
SIM Type	Micro SIM/3FF					
Function	Wireless Board					
Power Input	10~50V _{DC} External Power					
Configuration Interface	Micro-B USB					
I/O Module						
Model Name	WISE-S214-A	WISE-S250-A	WISE-S251-A	WISE-S472-A	WISE-S200-A	WISE-S235SL-A
Spec	4AI & 4DI	6DI, 2DO & 1RS-485	6DI & 1RS-485	1DI, 1RS-485 & 1RS-485 or 1RS-232	Upon Customization Request *MOQ required	Stack Light Monitoring Sensor

IoT Wireless Sensor Nodes

WISE-4210/WISE-221x Series



	Proprietary LPWAN(SUB-G) Wireless Module				Proprietary LPWAN(SUB-G) Built-in Temperature & Humidity Sensor*		Proprietary LPWAN (SUB-G) Wireless CT Node	Proprietary LPWAN (SUB-G) Wireless Analog Input Modules
Function	AP		Node/Wireless Board		Sensor Node		Self-Powered Node	
Model Name	WISE-4210AP-NA	WISE-4210AP-UA	WISE-4210-NA	WISE-4210-UA	WISE-4210-S231NA	WISE-4210-S231UA	WISE-2210-NA	WISE-2211-NA
Frequency	868MHz/923MHz	433MHz	868MHz/923MHz	433MHz	868MHz/923MHz	433MHz	868MHz/923MHz	868MHz/923MHz
Standard	IEEE 802.15.4g FSK/GFSK Modulation							
Data Rate	625 bps, 2.5k bps, 5k bps, 50k bps		625 bps, 50k bps				625 bps, 2.5k bps, 5k bps, 50k bps	
Power Input	10~50V _{DC} External Power						Self Powered	
Configuration Interface	Micro-B USB							
Network Capacity	64 Clients							
Outdoor Range (LOS)	5KM@625bps							
I/O Module						*Modularization doesn't effect on WISE-4210-S231 and WISE-221x series		
Model Name	WISE-S214-A	WISE-S250-A	WISE-S251-A	WISE-S200-A	WISE-S235SL-A			
Spec	4AI&4DI	6DI, 2DO & 1RS-485	6DI & 1RS-485	Upon Customization Request *MOQ required	Stack Light Monitoring Sensor			

** WISE-S250 does not support power saving mode

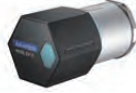
Accessories:

Antenna for WISE-4210/WISE-221X	
1750008836-01	863-870MHz Dipole Antenna
1750008837-01	902-928MHz Dipole Antenna
Battery for WISE-4210	
1760002647-01	Bat.Cylindrical 3.6V/2500mAh AA Li/SOCI2
CT for WISE-221X	
96PD-CT241-60A	3~60A, 10.0+/-0.2mm, -20~65°C
96PD-CT248-100A	5~100A, 15.7+/-0.3mm, -40~65°C
96PD-CT24F-200A	10~200A, 20.5+/-0.3mm, -40~85°C

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IoT Wireless Sensor Nodes

LoRaWAN Smart Vibration Sensor



Model Name		WISE-2410-NA WISE-2410-EA WISE2410JA1901-T WISE2410TA2001-T
Wireless Communication	Topology	Star (LoRaWAN)
	Frequency Band	US 902-928 (MHz); EU 863-870 (MHz); TW 920-925 (MHz); JP 920-928 (MHz)
	Spreading Factor	7~12
	Transmit Power	Up to +18dBm
	Data Rate	50 kbps at FSK mode EU868;21.9 kbps at SF7 mode US915;5.47 kbps at SF7 mode JP923
Vibration Sensor	Axis	X-Y-Z
	Frequency Range	10~1000Hz
	Amplitude Range	±2/4/8/16g
	Output Data Rate	3200Hz
	Resolution	10 bit (all g range)
	Sensitivity (TYP.)	31.2mg/LSB
	Noise (MAX. TA = 25°C. 0g)	±150mg
	Nonlinearity	±0.5 %
	Cross-Axis Sensitivity	±1 %
Sensitivity Change Due to Temperature	±0.02 %/°C	
Temperature Sensor	Operating Range	-20°C ~ 85°C (USB powered); -20°C ~ 50°C (Battery powered)
	Resolution	12 bit
	Accuracy	±2.0°C (±35.6°F) (vertical installation)
Mechanical	Enclosure	IP66
	Mounting	Mounting Stud; Curved Surface Magnet; Adhesives
	Dimension (L x W x H)	42mm x 40.2mm x 84.7mm
General	Power Input	3.6V AA Battery *2pcs (Not included)
	Configuration Interface	Micro-B USB
	Temperature (Operating)	-20°C ~ 85°C (USB powered); -20°C ~ 50°C (Battery powered)
	Temperature (Storage)	-25°C ~ 90°C
	Humidity (Storage)	5% ~ 95% RH

Intelligent RFID Gateway



Model Name		WISE-2834-CA
Wireless Communication	RFID Standard	EPC Global Class 1 Gen. 2 (ISO18000-6C)
	Frequency Band	US 902.75MHz - 927.25MHz; EU 865.7MHz - 867.5MHz; TW 922.25MHz - 927.75MHz
	Transmit Power	Available to adjust from +10dBm ~ +31.5dBm
	Receiver Sensitivity	-82dBm
	Antenna Connector	4 RP-TNC
General	Chipset	ARM Cotex-A8, 300MHz for system; ARM Cortex-M0 32-Bit 32MHz for I/O
	Memory	512MB DDR3L
	Storage	NAND Flash 512MB
	OS Support	Linux 3.12
	LED Indicators	Status, Serial (Tx, Rx), Wi-Fi communication, RFID Channel on/off, Wi-Fi Signal Strength
	Power Input	10V ~ 30V DC; Power Consumption: 3W (TYP.), 15W (Max.)
	Slot	1 x Micro SD card
	USB	1 x USB2.0 High Speed (Up to 480Mbps)
	Communication Speed	1 x 10/100 Based-T RJ-45; 1 x RS-485: 50 ~ 115.2 kbps
	Digital Input	4 Dry/Wet Contact
	Digital Output	4 Sink Type
	Configuration Tool	WISE Studio
	Dimensions (L x W x H)	190mm x 120mm x 30.2mm
	Mechanical	Mounting
Operating System	Temperature (Operating)	-25°C ~ 50°C
	Temperature (Storage)	20% ~ 95% RH
	Humidity (Operating)	-40°C ~ 85°C
	Humidity (Storage)	0% ~ 95% RH