

Wireless Solutions

WLAN Solution	2
3G / 4G Solution	3
Bluetooth Solution	4
ZigBee Solution	5





WLAN Solution

Introduction

WLAN (Wireless Local Area Network) links devices using wireless distribution method (spread-spctrum or OFDM radio), and generally providing a connection through an access point to the internet. WLAN gives users the mobility to move device around within a local coverage area and still be connected to the network. High-bandwidth allocation for wireless will make possible a relatively low-cost wiring.

WF-2572 Ethernet to Wi-Fi Bridge

The WF-2572 is an Industrial Ethernet to Wi-Fi Bridge that creates a connection between an 802.11a/b/ g wireless LAN and a device with a standard Ethernet port. The Bridge transparently conveys data between devices with a 100Base-TX Ethernet interface and a wireless LAN without drivers or complicated addressing schemes. This significantly reduces the complexity of network connectivity and wireless system deployment and also provides wireless LAN and Internet connectivity to industrial, scientific and automotive applications.

Applications







3G /4G Modem

Introduction

ICP DAS provides various industrial Tri-band 3G or LTE 4G modem. The modems utilize the 3G/4G network for convenient and inexpensive data transfer from remote instruments, meters, computers or control systems in either live data or packet data. The modems have the integrated TCP/IP stack so that even simple controllers with serial communications ports can be connected to the modem without the need for special driver implementation.

GTM-204M-4GE 4G LTE and Quad-band GSM modem

The GTM-204M-4GE is an industrial 4G LTE and Quad-band GSM modem with RS-232 and USB interfaces that work at frequencies of FDD LTE B1/B3/B5/B7/B8/B20 and WCDMA 850/900/2100 MHz and GSM 850 MHz, EGSM 900 MHz, DCS 1800 MHz , PCS 1900 MHz. The modems utilize the 4G or 3G or GPRS network to transfer data. The features of the GTM-204M-4GE allow a variety of PLC and PC applications to take advantage of SMS and 4G or 3G or GPRS connectivity.



Applications



Bluetooth

ICP

Introduction

The Bluetooth technology is a short range wireless technology, and it's the piconet network. The Bluetooth technology is defined and maintained by the Bluetooth Special Interest Group (SIG). The newest Bluetooth technology is Bluetooth 4.0, and it also calls Bluetooth low energy (LE).

The Bluetooth LE has the following features like worldwide operation, robust, short range, low power and builtin most of mobile devices. The ICP DAS provides various Bluetooth LE products such as RS-232/RS-485 to Bluetooth LE and USB to Bluetooth LE converters.

BLE-USB USB to Bluetooth 4.0 Converter

The BLE-USB module is small-sized wireless Bluetooth low energy (LE) converter based on the Bluetooth 4.0 standard that allow USB interface to be converted to Bluetooth LE piconet network. The BLE-USB has two transmission modes – advertisement and connection mode. Users not only can send advertising packet in the advertisement mode but also can send connection packet in the connection mode. It supports different roles in each transmission mode. One is broadcaster and observer in advertisement mode, and the others is central and peripheral in connection mode. User can use AT command to setup the BLE-USB. The AT command not only can set role of Bluetooth LE, but also it can set some connection parameters (e.g. RF power level, broadcast parameters and slave amount). The BLE-USB also provide slave security mechanism. The mechanism can obstruct illegal master, and the slave will ignore connection request from illegal master. In addition, ICPDAS provides software utility to easily configure and test the BLE-USB modules via USB.





ZigBee

Introduction

The Bluetooth technology is a short range wireless technology, and it's the piconet network. The Bluetooth technology is defined and maintained by the Bluetooth Special Interest Group (SIG). The newest Bluetooth technology is Bluetooth 4.0, and it also calls Bluetooth low energy (LE).

The Bluetooth LE has the following features like worldwide operation, robust, short range, low power and builtin most of mobile devices. The ICP DAS provides various Bluetooth LE products such as RS-232/RS-485 to Bluetooth LE and USB to Bluetooth LE converters.

BLE-USB USB to Bluetooth 4.0 Converter

The BLE-USB module is small-sized wireless Bluetooth low energy (LE) converter based on the Bluetooth 4.0 standard that allow USB interface to be converted to Bluetooth LE piconet network. The BLE-USB has two transmission modes – advertisement and connection mode. Users not only can send advertising packet in the advertisement mode but also can send connection packet in the connection mode. It supports different roles in each transmission mode. One is broadcaster and observer in advertisement mode, and the others is central and peripheral in connection mode. User can use AT command to setup the BLE-USB. The AT command not only can set role of Bluetooth LE, but also it can set some connection parameters (e.g. RF power level, broadcast parameters and slave amount). The BLE-USB also provide slave security mechanism. The mechanism can obstruct illegal master, and the slave will ignore connection request from illegal master. In addition, ICPDAS provides software utility to easily configure and test the BLE-USB modules via USB.

