

# Wireless LAN



## Introduction

The applications of 802.11b wireless LAN are getting more and more popular by the more and more mature technology. It's not only faster than the industrial traditional transmission i.e. RS-232, RS-485, RS-422 etc, but also able to decrease the troublesomely wiring works. It's also more mobility than Ethernet network.

Our T-316 is an Ethernet LAN to wireless LAN converter. In addition to the above advantages, it doesn't need to install any software or drivers when you use it. The setting process is very simple. Users don't need to modify the current hardware system or current running program then be able to enjoy the benefits of wireless transmission.

# Wireless LAN

## Ordering Information / Options

T-316: 11Mbps Wireless Ethernet  
NWH6110: 11Mbps Wireless Ethernet Building Bridge  
NWH650: 11Mbps Wireless Building Access Point  
NWH660: 11Mbps Wireless Access Point  
NWA0106: 6dBi Indoor High-Gain Directional Antenna  
NWA0208: 8.5dBi Outdoor High-Gain Directional Antenna  
NWA0214: 14dBi Outdoor High-Gain Directional Antenna



T-316

### T-316

- High 11Mbps Transmission Speed and Quality
- Converts Wired Ethernet Data to Wireless Format Effortlessly
- Minimizes Wireless Security Concerns in Public Areas



NWH6110

### NWH6110

- Industrial IEEE 802.11b Standard Compliant
- Superior Coverage and High Transmission Quality
- Remote Configuration
- Comprehensive Network Management Tools
- Multi-Level Security
- Antenna Alignment Monitoring
- Repeater Bridge



NWH650

### NWH650

- Industrial IEEE 802.11b Standard Compliant
- Superior Coverage and High Transmission Quality
- Comprehensive Network Management Tools
- Easy and fast network



NWH660

### NWH660

- Industrial IEEE 802.11b Standard Compliant
- Superior Coverage and High Transmission Quality
- Comprehensive Network Management Tools



P-380A

### P-380A Outdoor Router

- IEEE 802.11b Access Point, Router, Bridge
- 802.1x/EAPoLAN/with MD-5/TLS/TTLS/SIM support (in preparation)
- Wi-Fi compliant
- Remote software upgrade via HTTP
- Programmable output power

# Accessories



NWA0106

## NWA0106

- 6dBi Directional Antenna
- HPBW/Horizontal: 80°
- HPBW/Vertical: 80°
- Dimensions: 115x76x76mm



NWA0208

## NWA0208

- 8.5dBi Directional Antenna
- HPBW/Horizontal: 70°
- HPBW/Vertical: 65°
- Dimensions: 125x120x42mm



NWA0214

## NWA0214

- 14dBi Directional Antenna
- HPBW/Horizontal: 30°
- HPBW/Vertical: 30°
- Dimensions: 240x240x60mm

Distance \ Mode	Ad-hoc	Infrastructure
0~100M (indoor)	T-316	NWH650*1 + T-316
100~300M (indoor)		NWH650*1 + T-316
300~1000M (indoor)		NWH660*2 + NWA0106*2 + T-316
1000~2000M (outdoor)		NWH660*2 + NWA0208*2 + T-316
2000~4000M (outdoor)		NWH660*2 + NWA0214*2 + T-316
4000~8000M (outdoor)		NWH660*2 + NWH6110*2 + NWA0214*4 + T-316
>8000M		{NWH660*2 + NWH6110*2 + NWA0214*4 + T-316}*n

# GSM/GPRS Modules

## SERIES



### M1203A: 900/1800 GSM/GPRS External Modem

- Dual Band GSM/GPRS modem (EGSM900/1800 MHz)
- Fully Type Approved
- Fully compliant with ETSI GSM Phase 2 + specifications (Nomal MS)
- Output power: Class 4 (2W @ 900 MHz); Class 1 (1W @ 1800/1900 Mhz)
- Input voltage: 5V-32V
- Input current:
  - Always on version (GPRS): -13, 2mA in idle mode, 130mA in communication (GSM 900), 94mA in communication (GSM1800/1900)@ 13, 2V
  - Autoshutdown version (GSM): -2, 5mA in idle mode, 130mA in communication (GSM 900), 94mA in communication (GSM1800/1900)@ 13, 2V
- Temperature range: -20°C - +50°C operating; -25°C - +70°C storage
- Overall dimensions: 98x54x25mm
- Weight: 130g



### GM-29: 900/1800 GSM/GPRS External Modem

- Dual band EGSM 900/1800 MHz GSM/GPRS modem
- GPRS Class B (4+1)
- Compliant with ETSI GSM Phase 2+ standards (Sma11 MS)
- Output power:
  - Class 4 (2W @ 900 MHz)
  - Class 1 (1W @ 1800 MHz)
- Supply voltage: 5-32 VDC
- Standard RS232 9-way serial connection
- Overall dimensions: 77 x 67 x 26 mm
- Operating temperature range: -25°CJ to +55°CJ
- Storage temperature range: -40°CJ to +85°CJ
- Weight: < 130g



### GM-305: GPS Receiver

- General: L1 (1575. 42MHz), C/A code, 12-channel,
- Carrier-Aided with HWTTrack.
- Sensitivity: -165 dBW minimum
- Update Rate: 1Hz
- Datum: 219 standard datum; WGS-84 (default)
- NMEA Messages: GGA, GSA, GSV, RMC (standard output) GLL and VTG (optional)
- Operation Temperature: -40°C to +85°C
- Storage Temperature: -55°C to +100°C
- Operating Humidity: 5% to 95%
- Primary Power: 3.8V~8V DC, -10%
- Power Consumption: 125mA @ 3.3V; 70-90mA with power saving
- Serial Port: Standard RS-232
- 10s: 1 PPS & TX out @TTL level
- Dimension: 45mmx30mmx13mm w/o housing
- Weight: 25g w/o housing

# Applications

