NETLINK BASIC SERIES

CU009-A

ENGLISH

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Tittron USB 3.0 Gigabit Ethernet Adapter | WCH CH398 | 10/100/1000 Mbps



PRODUCT OVERVIEW

The CU009-A USB 3.0 to Gigabit network adapter is a compact, high-performance LAN conversion module built around the WCH CH398 controller. It extends 10/100/1000 Mbps wired network connectivity for desktops and notebooks. It connects to the host via a standard USB port and requires no internal disassembly for deployment. A dedicated installer simplifies driver setup and configuration. The RJ45 port supports automatic link negotiation; in full-duplex mode the theoretical bidirectional throughput reaches up to 2 Gbps for a stable high-bandwidth wired link. Integrated power management logic reduces power draw and extends battery runtime on portable devices.



Tittron NetLink Basic CU009-A
USB 3.0 Gigabit Ethernet Adapter

This NIC automatically detects the connected switch and negotiates the link rate, supporting 10Base-T, 100Base-TX and 1000Base-T. Under full-duplex operation, the corresponding link speeds are: 20 Mbps bidirectional for 10Base-T, 200 Mbps bidirectional for 100Base-TX, and 2 Gbps bidirectional for 1000Base-T. With its small, portable form factor, the adapter can be moved easily between hosts without occupying much desktop space. It works with devices equipped with USB 2.0 or USB 3.0 ports, including Windows ultrabooks, Chromebooks, MacBooks, regular laptops and desktops. A USB 3.0 port is recommended to achieve full rated performance.

SPECIFICATIONS

ELECTRICAL & INTERFACES

Controller IC	WCH CH398
Host Interface	USB 3.0 (backward compatible with USB 2.0)
LAN Interface	RJ45 Gigabit port, auto-negotiation, Auto-MDI/MDIX
Supported Ethernet Standards	10Base-T, 100Base-TX, 1000Base-T
Full-Duplex Link Rate	10Base-T: 20 Mbps; 100Base-TX: 200 Mbps; 1000Base-T: 2 Gbps
Half-Duplex Link Rate	10Base-T: 10 Mbps; 100Base-TX: 100 Mbps
Power Management	Built-in low-power sleep
Supported Operating Systems	Windows, macOS, Chrome OS
Mounting	External USB adapter, no internal installation required

KEY FEATURES

- Auto-negotiation for 10Base-T / 100Base-TX / 1000Base-T
- Full-duplex transmission with theoretical aggregated bidirectional bandwidth up to 2 Gbps
- Auto-MDI/MDIX; works with both straight-through and crossover Ethernet cables
- Integrated power-saving mechanism to reduce host power consumption
- Plug & Play with dedicated driver; no device disassembly needed
- Compact form factor for easy deployment and portability
- Compatible with USB 2.0 / USB 3.0; USB 3.0 recommended for full speed
- Works on mainstream platforms including Windows, macOS, Chromebooks, desktops and laptops

APPLICATIONS

- Ultrabooks: add Gigabit wired networking to slim laptops lacking native LAN ports.
- Desktop expansion: add an extra Gigabit port for traffic segregation.
- Home & office networks: replace unstable Wi-Fi with reliable wired connectivity.
- Chromebook mass deployment: wired access for education and self-service terminals.
- IT labs & test benches: portable Gigabit interface for network validation and debugging.
- Field maintenance: compact wired NIC carried by on-site service technicians.

IMPORTANT NOTES

- A USB 3.0 host port is required to reach full Gigabit speed; USB 2.0 limits bandwidth.
- Install the official WCH driver on Windows for maximum stability.
- The stated 2 Gbps full-duplex value represents total theoretical aggregated bidirectional bandwidth.
- Cat5e or better cabling is recommended for reliable 1000Base-T operation.
- The adapter draws power entirely from the USB port; no external power supply is required.
- Not all OS versions ship with native in-box drivers for the CH398 chipset.