MC10 T1S

SUPPORT：17265076798

MC10 T1S CONVERTER

MC10 T1S IS 10M T1S MEDIA CONVERTERS。

FEATURE：

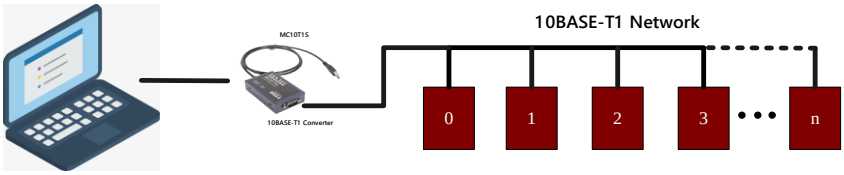
- 10Base-T1to 10M USB Ethernet
- Speed:10Mbps
- Point-to-Point
- Multidrop Support
- PLCA
- Status LED
- Metal Shell
- DB9 connector
- USB power supply

10BASE-T1S CONVERTER
USER MANUAL
10BASE-T1S MEDIACONVERTER

10BASE-T1S CONVERTER,

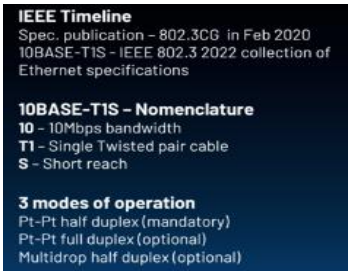
10BASE-T1S converters，support Multidrop bus line and Point-to-Point。DB9 connector，support PLCA。10BASE-T1S is IEEE 802.3cg stardard， Use UTP for communication. Supports a data rate of up to 10 Mbps for a single twisted pair cable, suitable for up to 25 meters of full/half duplex networks, aiming to achieve collision free and deterministic transmission on multi-point networks.

Archtecture：



Pinout：

Pin	Funciton	Connector
1	10BASE-T1 positive	DB9 pin 7
2	10BASE-T1 negative	DB9 pin 2



Characteristic：

- USB power supply, PLCA endpoint control with USB Ethernet adapter.
- Temperature range: -40 ℃ to+85 ℃
- Power：100mW；
- Speed：10Mbit/s
- Industrial control, robotics, and automotive network data collection
- 77x50x26.5mm

OPERATING

1-SETTING

The customer needs to install the driver first (it needs to be a Win10 or above system or Linux). After the driver installation is completed, the product will be plugged into the computer and a 10BASE-T1S network device will be displayed in the Network Adapter bar of the Device Manager, indicating that the product is working normally.

Product List:

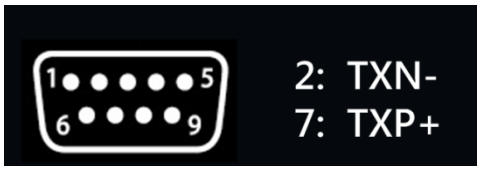
Name	Quantity
MC10T1S	1
DB9 adapter	1

The device is connected to the client computer through a USB interface. At the same time, the 10BASE-T1S Ethernet line is connected to the target device network through the DB9 interface, and two wire harnesses can be connected to the target testing device using the provided universal adapter. The interface definition is shown in the following figure:

For detailed usage instructions, please refer to Chapter 2, which provides simple usage instructions.

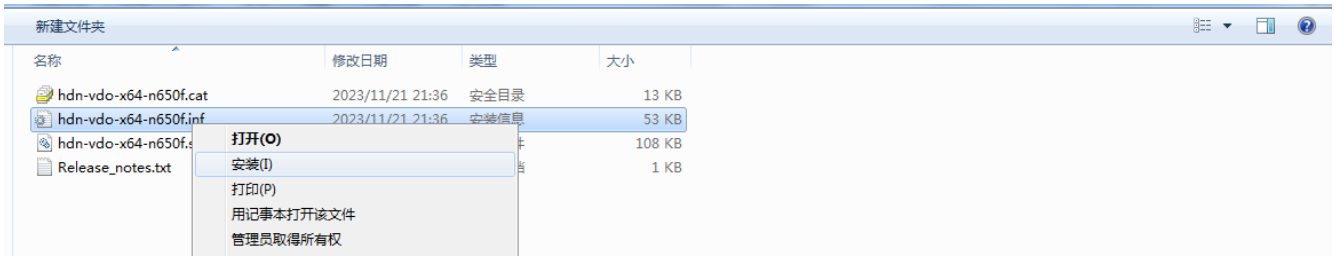
2-BRIEF INSTRUCTIONS FOR USE

Step 1: Connect the MC10T1S Ethernet converter to DUT, power on DUT, and then connect the TXP+ and TXN - wires of the MC10T1S converter to DUT. The following figure shows the pin definitions of the converter, with pin 2 being TXN - and pin 7 being TXP+. Please pay attention to the pin positions.

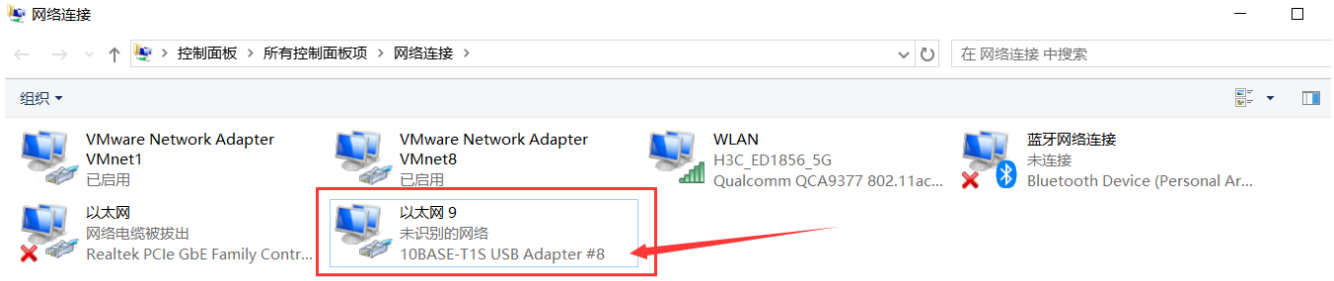


Step 2: Install the driver, download the driver package for MC10T1S, and extract it to the current directory. Then, right-click on the hdn-vdo-x64-n650f.inf file, an option will pop up, and click "Install (I)". After installation is complete, a prompt will appear indicating successful installation. (Note: It can only be used after Win10, and systems before Win7 do not support it.)

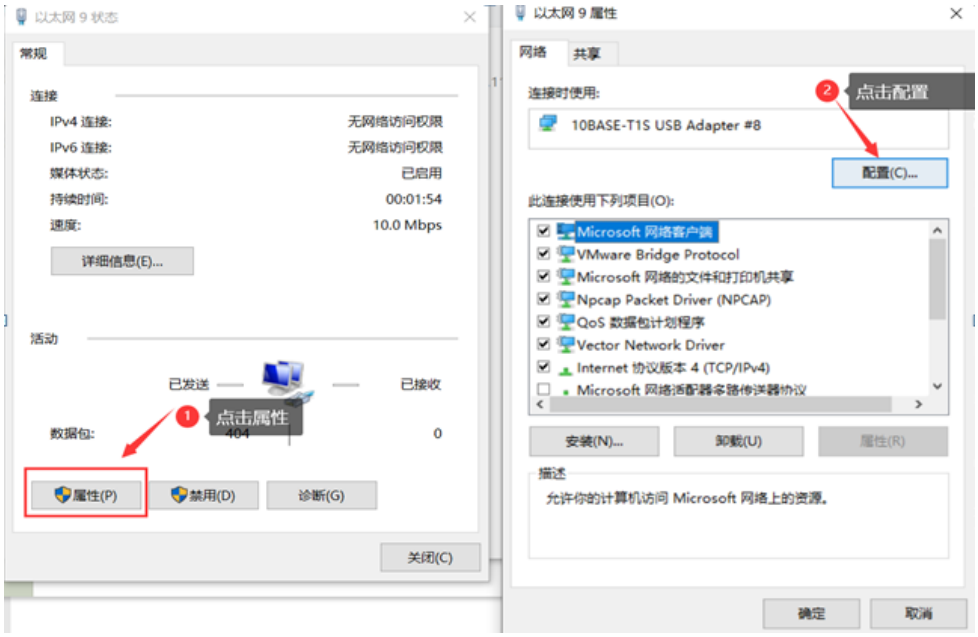
You can also use the newest driver from Microchip web site.



Step 3: Connect the USB port of the MC10T1S converter to the computer again. As the driver has already been installed, a 10BASE-T1S network connection device will be displayed on the network adapter interface (you can click: Settings - Network and Internet - Ethernet - Change Adapter Options).
As shown in the figure:



Step 4: Double click the network link to bring up the Ethernet adapter status, and then click the "Properties (P)" button. The Ethernet device area properties dialog box will pop up. Then click on "Configuration (C)" to enter the configuration interface. As shown in the following figure:



Step 5: After entering the configuration interface, select the "Advanced" tab to configure the node ID of the converter and the total number of nodes written to the current network. As shown in the following figure:

Step 6: After everything has been configured, the final step is to place the adapter in the same network segment as the IP addresses of the nodes in the network.

For example, the IP address of device 0 is 192.168.1.122, and the IP address of device 1 is 192.168.1.123 •••, which means the network segment is 192.168.1.xxx. Configure the IP address of this adapter to 192.168.1.155 (not repeated), which is on the same LAN segment. In this way, you can open the DOS terminal on your computer and ping any tested device node, such as ping 192.168.1.122 -t, to send a data packet to the target device.

Status LED display:

The green light will remain on when the device is plugged in. After the driver is successfully installed, the network will automatically connect and the yellow light will flash. When there is data communication, the yellow light will flash at different frequencies according to the amount of data.(The status may depending on different hardware versions)

HDN-VDO MC10T1S driver program:
https://wwm.lanzouo.com/b01rvorde Password:actv

Of course, you can also use the data collection software and Ethernet transceiver testing tools we provide:

Wireshark Tool:
https://wwm.lanzouh.com/iK3eQtjvfti Password:d5te
Data send tool:
https://wwm.lanzouh.com/i3bNTtjv7hi Password:4pd7
Testing tool:
https://wwm.lanzouo.com/b01psw5vi Password:bn3z