

Fast Ethernet Application

Fast Ethernet 100BaseT

Giga-bit Ethernet is our principle network to provide the best performance. However, there are many applications that backward compatibility is required for GigE cameras.

GigE cameras can be connected to common fast Ethernet (100 Base T) with slower frame rate.

There is no specific hardware changes to be used in the fast Ethernet environment.

Setting changes for Fast Ethernet

Because of high bandwidth and packet structure optimized for giga bit, it must change the data flow structure to slower speed. If you connect GigE cameras to fast Ethernet, it may detect the device but may not display correct image or time our error may happen.

The basic difference of the fast Ethernet property is set in IP Engine configuration.

1. Driver: If your are using SDK 2.3.0, the driver installation tool will display current network adaptor and the driver. For fast Ethernet, only Window Stack driver is used. You can choose Window Stack in the tab of the Installation tool dialog.
2. Device detection: Once camera and PC are connected and powered up, opened Coyote application and click "Detect". It may take for a while to show the device IP address. Click "OK" to connect.
3. Configure IP Engine Flow control: Before starting image grabbing, click configuration button. In the connection tab, you will see IP Engine and Flow control. Change at least three critical numbers as shown.

Link speed must be 100 Mbits/sec.

The data rate is 10, 000,000 bytes or less.

Also the Inter Packet Delay is required for slow connection and at least 10 packet delay (300ns) may be required for our GigE camera series.

Other Setting Changes

In some cases, skipping frames of grabbing may be required. This slows down the frame rate.

Camera configuration and all functions should work as the same way as Giga-bit interface.

