

ETHERNET SERİ ÇEVİRİCİ GENEL ANLATIMI

Mustafa BAŞAK

Entek Elektronik ve Yazılım

Tibbo Ethernet Çevirici işlemleri

- **Seri Porttan** alınan verileri **Ethernet** protokollerine dönüştürür.
- Ayarlanabilecek tüm **seri port parametreleri** ayarlanabilir,
- Ayarlanabilecek tüm **ethernet parametreleri** ayarlanabilir,

Tibbo cihazları içerisindeki çevirici yazılımı (Sol)

Serial-over-IP (Sol) Application Firmware

Here are the main features of the [serial-over-IP \(Sol\) application](#) designed for our [BASIC/C-programmable](#) devices (fixed-function [Device Servers](#) and [serial-to-Ethernet modules](#) have a similar set of features):



Networking

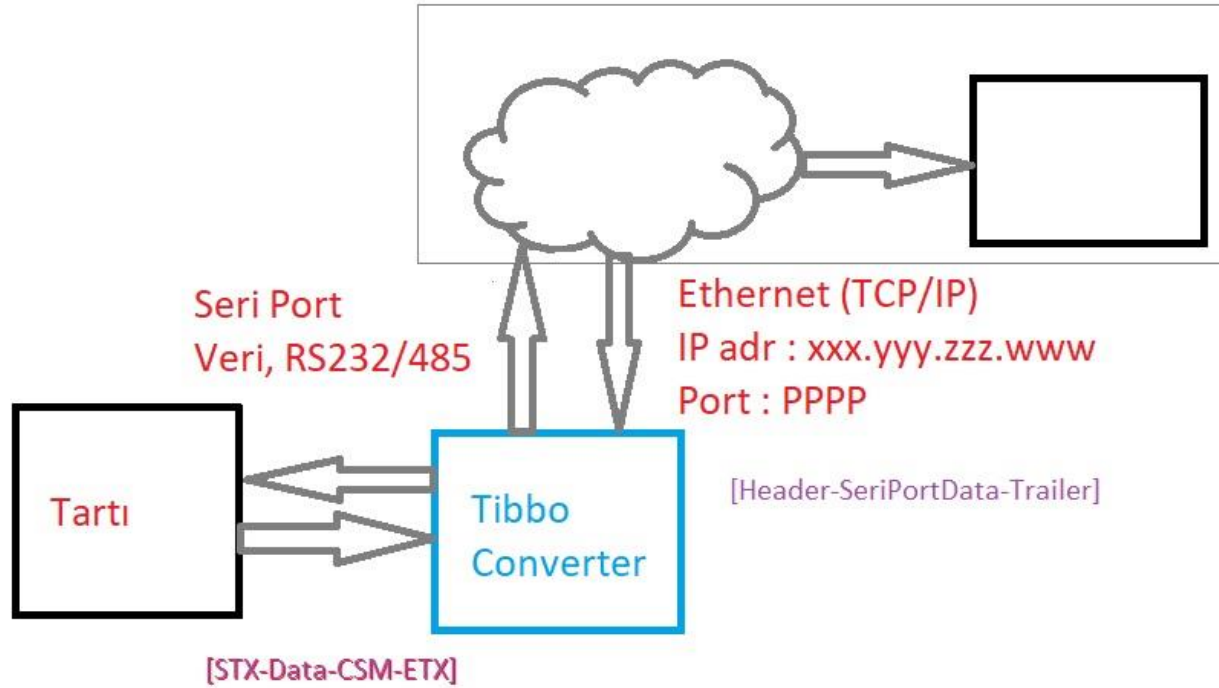
Support for Ethernet, Wi-Fi, PPP (4G/LTE) and PPPoE ("ADSL") networking.



Serial ports (channels)

- Up to four serial ports or channels.
- Full- and half-duplex serial port modes (for RS232, RS422, and RS485 communications).
- Remote control of RTS, CTS, DTR, and DSR lines.
- "On-the-fly" network-side commands for an immediate change of the serial port configuration (baud rate, parity, etc.).
- Serial-side "modem" commands for the control of network links.

Seri-Ethernet Çevirici Projesi



TCP/IP ile ilgili bazı Genel VS işlevleri - 1

- `ipadresimiz = IPAddress.Parse(txt_IPval.Text);`
- `dinle = new TcpListener(ipadresimiz, Convert.ToInt16(txt_PortNo.Text));`
 - `dinle.Start();`
- `t = new Thread(new ThreadStart(okumaya_basla_server));`
 - `t.Start();`

// Create a TCP/IP socket.

```
Socket socketTCP = new Socket(AddressFamily.InterNetwork, SocketType.Stream, ProtocolType.Tcp);
```

// Connect the socket to the remote endpoint. Catch any errors.

```
try
{
    socketTCP.Connect(remoteEP);
}
catch
{
    MessageBox.Show("Problem (Bağlantı açık kalmış olabilir)");
}
```

TCP/IP ile ilgili bazı Genel VS işlevleri - 2

```
try
```

```
{ // sends the text with timeout 10s
```

```
    //MyClass.Send(socket, Encoding.UTF8.GetBytes(str), 0, str.Length, 10000);
```

```
    Send(socketTCP, Encoding.UTF8.GetBytes(txt_TCP_TX.Text), 0, txt_TCP_TX.Text.Length, 10000);
```

```
}
```

```
catch { /* ... */ }
```

```
socketTCP.Close();
```

TCP/IP ile ilgili bazı Genel VS işlevleri - 3

```
Int32 port = 1000;
byte[] buffer = new byte[12]; // length of the text "Hello world!«

EndPoint remoteEP = new EndPoint(IPAddress.Parse("1.0.0.95"), port);

// Create a TCP/IP socket.
Socket socketTCP = new Socket(AddressFamily.InterNetwork, SocketType.Stream, ProtocolType.Tcp );

// Connect the socket to the remote endpoint. Catch any errors.
try
{
    socketTCP.Connect(remoteEP);
}
catch
{
}

try
{ // receive data with timeout 10s
    //Thread thrReceive = new Thread(Receive);
    Receive(socketTCP, buffer, 0, buffer.Length, 1000);
    string str = Encoding.UTF8.GetString(buffer, 0, buffer.Length);
}
catch (SocketException ex)
{
    MessageBox.Show(ex.Message);
    return;
}
```