

Network Gateways

What's a Gateway? A gateway is a device which does conversion between networks which have different protocols. The translations have enough functionality to be useful for most applications.

The native digital network interface for the MFT B-series is Modbus, ASCII or RTU serial using the RS-485 multi drop serial port. This section describes how some of the popular gateways work. To support other popular industrial networks, the following solutions are available from Kurz or directly via the manufactures of the gateway. Some devices require a configuration file. All devices listed below are DIN rail mounted and require 24 VDC power. Kurz offers all of the below devices in a N4 enclosure with universal AC power supply.

Many of the HMI software packages (WonderWare, Lookout, Fix32) and DCS units can take advantage of the electronic data sheet (EDS file) for the various Kurz gateway options to simplify the initial setup. These are available with this manual and the latest versions can be downloaded from our website.

Modbus TCP/IP

www.modbus.org

Serial to Ethernet Gateway, uses TCP/IP protocol version of Modbus on IP application port 502. As the master on the IP side makes request, it can select any slave address. This allows multiple applications and different devices to operate at the same time on the IP side to different Modbus serial devices on the same RS-485 network.

SixNet: model ET-GT-485-1, www.sixnetio.com

BB-Electronics: model MES1B, www.bb-elec.com

Anybus Communicator: model AB7007, www.anybus.com

Most of the above gateways are configured on their Ethernet side with a built-in web-server.

Example configuration setups for the BB-Electronics [MES1B](#) and the SixNex [ET-GT-485-1](#) are available for review

Profibus DP

www.profibus.org

Modbus serial to Profibus serial , Configuration file available from Kurz which supports up to 10 MFT based products on the Modbus RS-485 side of the gateway.

Anybus communicator: AB7000 order code. www.anybus.com

An example of how to configure the Communicator or to load the configuration using Modbus Addresses 1 to 10, RTU, 38k baud is [shown here](#).

The Ethernet version of Profibus is known as **Profinet-I/O**. There are gateways from Modbus to this version too from several vendors including www.anybus.com, their model AB7013. This device supports web-based configurations, e-mail and FTP and Modbus TCP/IP read only.

DeviceNet

www.odva.org

Modbus to serial DeviceNet. Configuration file available from Kurz which supports up to 10 MFT based products on the Modbus RS-485 side of the gateway.

Anybus communicator: AB7001 order code, www.anybus.com
Ethernet version, EtherNet/IP: AB7007 order code,
www.anybus.com

Others Networks

Anybus offers about 10 different versions of the Anybus communicator. This device does Modbus on one side, the other bus on the other. It has a mapped memory of up to 512 bytes so it supports 10 MFT units with up to 50 bytes unique data from the registers.

Anybus X-gateways

[HMS](#) has a version of their gateway line (uses 2-Anybus-S modules) which supports the same wider range of networks and a web-base configuration and OPC server, on the Ethernet versions. This is a more expensive option (2x) but many be worth it to have remote configuration via a web-interface or to achieve the OPC interface using a more reliable embedded CPU than a general purpose Windows PC server running the OPC server software.