The Millennium Series network gateway product family provides seamless data transfer between a wide variety of fieldbus, Ethernet and RS-485 networks. This product line has been exclusively designed with an emphasis on providing a uniform interface, configuration and application experience. This commonality reduces the user’s learning curve, reducing commissioning time while simplifying support. All Millennium Series gateways support common features such as:

- A common form factor
- USB connectivity
- 2-wire/4-wire RS-485 network
- Desktop, panel/wall and DIN-rail mountable
- Power can be supplied via the USB cable, as a 7-24VDC input on the main terminal block, or via IEEE 802.3af Power over Ethernet (PoE on ETH-1000 only)

The heart of the Millennium Series product family is its 4kB internal database, which is addressable as a variety of data types. The database allows information to be routed from any supported network to any other supported network. Data may be stored in the database in either big-endian or little-endian style. Another fundamental aspect of the Millennium Series is the concept of a configurable “service object”, which is used for any master/client protocol to describe what services are to be requested on an associated network.

The Microsoft Windows®-based ICC Configuration Studio allows users to create and administer complete automation system projects, as well as configure and interact with any Millennium Series gateway in a common manner via USB. This all-encompassing and customizable software program allows the user to perform tasks such as:

- Graphically interact with the internal database in real-time
- Configure protocols, network characteristics, and client/server object definitions
- Automatically update device firmware
- Define autonomous internal elements such as database logic, email alarms and object failsafe values
- Monitor active network diagnostics and statistics
- Capture, display and save serial network traffic with microsecond-precision timestamps

Supported networks/protocols currently include:

- EtherNet/IP (client & server)
- Modbus/TCP (client & server)
- Modbus RTU (master, slave & sniffer)
- BACnet MS/TP (client & server)
- BACnet/IP (client, server & BBMD)
- Allen Bradley CSP (client & server)
- PROFIBUS DP-V1
- DeviceNet
- EtherCAT®
- Johnson Controls Metasys® N2 (master & slave)
- PROFINET IO
- Siemens FLN (master & slave)
- For a complete list of supported drivers, refer to the “Millennium Series Supported Drivers List”

For more information about these and other industrial & commercial communication interface products, visit us online at http://www.iccdesigns.com.