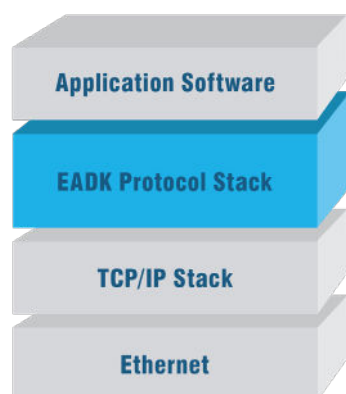# NetStaX™ EADK

ETHERNET/IP ADAPTER DEVELOPERS KIT

Benefits

- Tested with ODVA CT19
- Field Proven for over 20 years
- Complete adapter class features
- High performance
- Simplified porting
- Minimized resource use
- Scalable

EADK Contains

- EtherNet/IP Adapter Class Protocol Stack 'C' source code designed for portability
- EADK Adapter DLLs (32 & 64bit) with C++ function call API, C# API for Windows/ .NET applications
- EADK Getting Started, Software Reference Manuals and Porting guide
- Adapter Class example code
- Sample Platfom files
- Sample EDS files
- Sample SOC files for pre-conformance testing

ENABLING CONFORMANT ETHERNET/IP CONNECTIVITY

Pyramid Solutions' NetStaX™ EtherNet/IP Adapter Development Kit (EADK) enables you to quickly introduce conformant EtherNet/IP Adapter Class functionality for your products.

Our EADK stack provides complete Adapter Class functionality for EtherNet/IP connections and messaging.

The EADK stack provides a logical and manageable API for interfacing to your application code and utilizes the sockets interface of your products TCP/IP stack for TCP and UDP messaging.

The EADK comes with 12 months of download access to the latest version and built in phone/email tech support.

Additional services options are available to assist you with EtherNet/IP requirements, design, EADK Stack integration, pre-conformance testing and more.

Pyramid's EADK is distributed under a royalty free software license agreement.

EADK Features

EtherNet/IP Compatibility

- Tested with ODVA CT19
- Enables EtherNet/IP Adapter Class functionality
- UCMM (unconnected) message client and server
- Class 3 (connected) message server
- Class 1 (I/O) connection server
- CIP Security Option available*
- CIP Safety Option available**

Resource Utilization and Management

- All resources initialized at stack startup
- No dynamic memory or thread allocation
- Runs on a single thread
- Scalable for optimizing resources

Platform, OS and TCP/IP Stack Compatibility and Portability

- "Platform file" approach separates routines into a single set of platform files to simplify porting
- Sample platform files provided
- Stack core source is 'C' code for portability
- Included 32/64 bit DLLs are compatible with Windows 7, 8.x, 10 and 11 for developing Windows and .NET applications

- The EADK source code is designed using an object-oriented approach. It's building blocks, such as TCP/IP sessions, CIP connections, explicit requests, and all implemented CIP objects, including assemblies, are grouped into separate modules with corresponding functionality. This allows for easy understanding and debugging of the source code.

Supported/Included Objects

- Message router
- Connection manager
- Port
- Identity
- Ethernet link
- TCP/IP
- QOS
- DLR***
- CIP sync****
- Assembly
- File object
- Class 0 support
- Energy object
- LLDP objects
- User Defined objects

Application Software
EADK Protocol Stack
TCP/IP Stack
Ethernet

PYRAMID SOLUTIONS

*EADK-SECURE Option required and an SSL you provide
**ExDK-SAFETY-EADK Source Code Option to enable the EADK stack to work with HMS/IXXAT's CIP Safety solution purchased separately
***Configuration object only. DLR Stack and Switch hardware not included
****Configuration object only. IEEE 1588 stack not included

EtherNet/IP™