



# KEPServerEX™

## OPC Server Software

### Features

- OPC server software for PointScan™ series I/O
- Provides seamless access to PointScan I/O data from within the DASyLab® programming environment. DasyLab will automatically open KEPServer in a minimized mode each time you run your DASyLab application. This allows KEPServer to function as a true background server application with little or no intervention required by the end user.
- Supports OPC Data Access v1.0a and 2.0, Fast DDE and SuiteLink, and all DDE formats including AdvancedDDE
- Supports measurement rates up to 10 times per second
- Supports Ethernet connectivity using dedicated networks and also over company network connections (LAN)

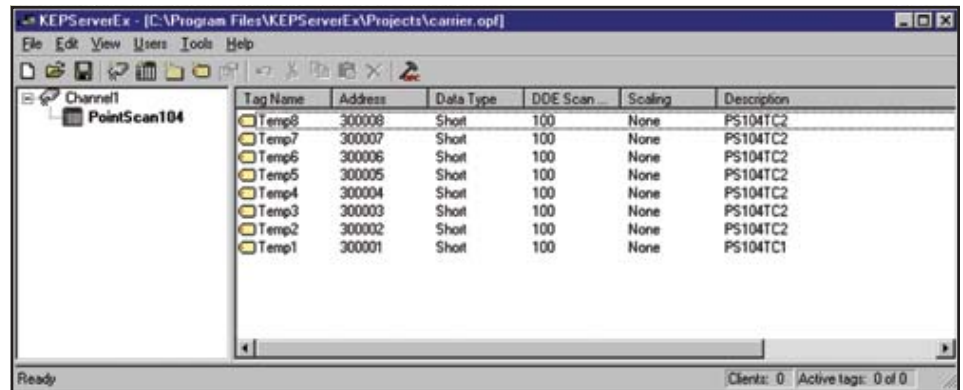
KEPServerEX™ is a high-performance, 32-bit OPC server application capable of supplying data from PointScan™ series distributed I/O modules to any DDE (Dynamic Data Exchange) or OPC (OLE for Process Control) client application. Commercially available OPC client application software include: DASyLab®, LabVIEW®, Excel®, Visual Basic®, and virtually all SCADA/HMI (Human-Machine Interface/Supervisory Control and Data Acquisition) offerings.\*

### Unmatched Connectivity

KEPServerEX provides the widest range of connectivity of any commercially-available OPC server. It supports virtually all client server technologies:

- OPC Data Access Version 1.0a
- OPC Data Access Version 2.0
- FastDDE for WonderWare
- SuiteLink for WonderWare
  - DDE Format CF\_Text
  - DDE Format XL\_Table
  - DDE Format AdvancedDDE

KEPServerEX supports the original 1.0a and the new 2.0 Data Access versions of the interface insuring compatibility with legacy and emerging client applications.



KEPServerEX software lets you use any DDE or OPC client application to collect data from Iotech's PointScan series distributed I/O modules

The supported DDE formats CF\_Text and XL\_Table are the standard formats as defined by Microsoft. All DDE-aware applications support the CF\_Text format, but the XL\_Table format is used within Microsoft® Excel to gather DDE data in an array format that fills multiple cells in the spread sheet. AdvancedDDE is a variation on the normal CF\_Text format allowing larger amounts of data to be transferred between applications at higher rates of speed, and with better error handling than a normal CF\_Text DDE link. FastDDE/SuiteLink format provides native support for Wonderware® Factory Suite products.

KEPServerEX's support of Wonderware Corporation's FastDDE and SuiteLink simplifies the task of connecting the server with FactorySuite applications such as InTouch. By leveraging the Wonderware connectivity toolkit, KEPServerEX can simultaneously provide OPC and FastDDE/SuiteLink connectivity. With built-in support of these Client/Server technologies, KEPServerEX accesses device data without the need for an intermediary software bridge, and the familiar look and feel of FastDDE/SuiteLink tag database setup is maintained.

### Remote Server Support

Remote data access configurations can be used to connect multiple PCs located on the same network to PointScan modules within the same system. Each PC location

is given access to raw I/O data from the PointScan modules. Each PC can then process this data independently through software installed on each PC. This is perfect for applications that want to have a dedicated master test and control PC and also have several remote PC locations that act as supervisory or quality control check in stations. This configuration is also useful for real-time backup storage of valuable test data on a second PC location in case the main test PC becomes disabled during the test.

KEPServerEX supports three methods of remote data access:

- DCOM (Distributed COM)
- Multiple Kepservers installation
- NETDDE

Based on Microsoft's COM technology, **DCOM (Distributed COM)**, allows a single OPC server to provide data to client applications running both locally and on remote PCs. The DCOM approach requires that you be able to make the necessary changes to your network configuration by accessing the Microsoft DCOM settings and modifying them as required by the Kepservers instructions. For those who are not able to make the necessary network configurations for DCOM use, there is the **Multiple KEPServer** configuration. This involves installing KEPServer on each PC that you would like to have interfaced with PointScan I/O data. Each PC on the

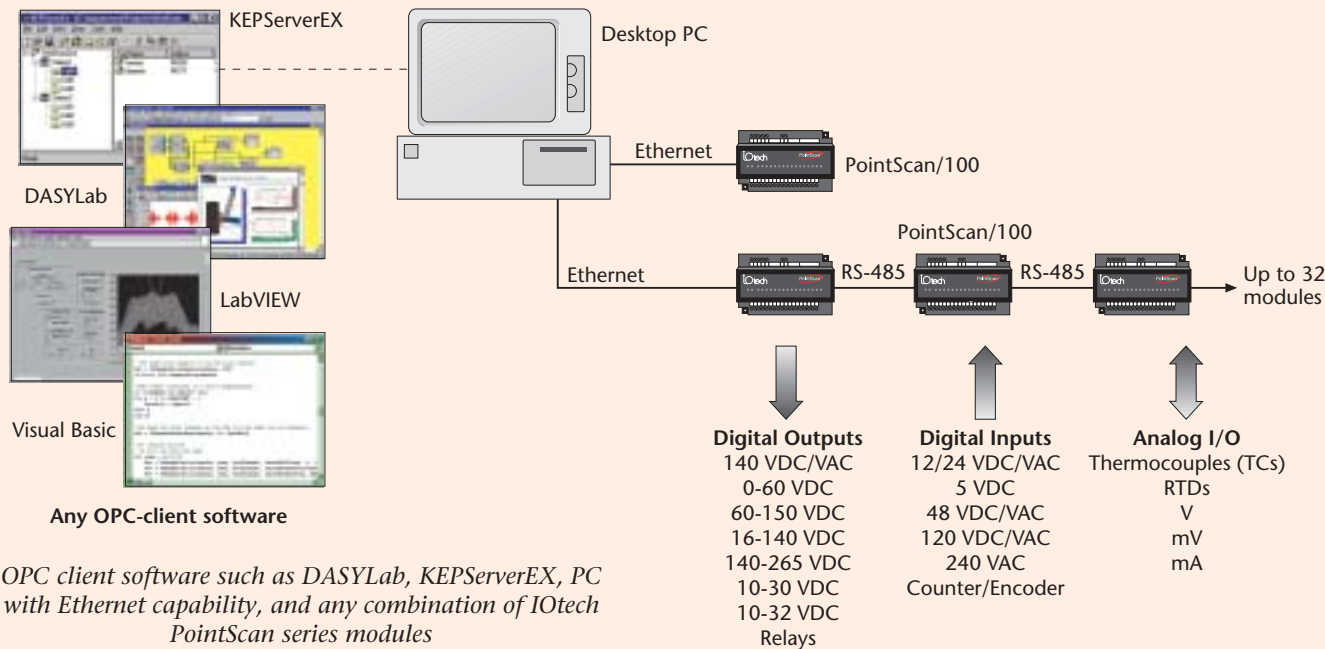
\* WonderWare/Intouch, Rockwell Automation/RSView32, Intellution/FIX, and more



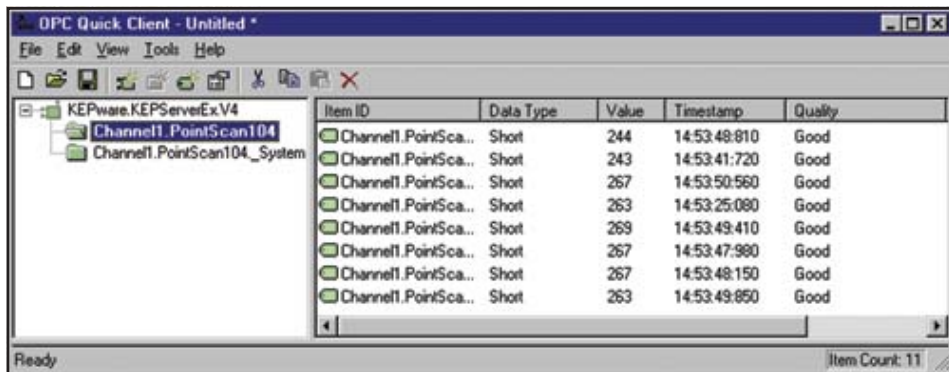
# KEPServerEX™

## General Information

### Typical PointScanb System Configuration



network will then function as an independent Pointscan interface station and can perform completely separate software operations with the PointScan I/O data. Multiple KEPServer installations are capable of accessing the same PointScan modules at the same time. This method provides the quickest and easiest way to have multiple PCs accessing the same PointScan modules. For DDE clients, KEPServer/EX will automatically start NETDDE services and register all of the required DDE shares to allow remote DDE clients to access device data.



Defining unique tag names for PointScan-based I/O is simplified by KEPServerEX

### I/O Device Connectivity

OPC servers are typically written as single function programs that can handle only a single device type or protocol at a time. The result is that multiple OPC servers are required to handle a range of devices and protocols. KEPServerEX is written as two separate components, a server and device drivers. The server component houses all of the user

interface and OPC technology, and the device drivers plug into this server component. KEPServerEX allows multiple device drivers to operate concurrently; consequently, it is possible for PointScan series I/O modules to be seamlessly integrated into a system with either programmable logic controllers/PLCs or distributed control systems/DCS hardware\*.

### Always On-Line

KEPServerEX is on-line all the time. This full time on-line mode of operation allows a KEPServerEX project to be modified while the server continues to supply data to client applications. More importantly, user defined tags can be added to the server without shutting down client applications. When new tags are added to the server, they are immediately added to the OPC browse space, and will be available to OPC clients.

\* Contact factory for information on using KEPServer with hardware devices other than IOtech PointScan series modules



# KEPServerEX™

## Specifications & Ordering Information

### Tag Management

KEPServerEX's powerful user defined tag management features allows multiple tag groups to be defined on a device by device basis. Drag and drop editing makes adding large numbers of tags easy. Easy to follow tag display screens provide a convenient way to keep track of I/O channel names within large systems.

### Built-in Diagnostics

KEPServerEX's diagnostics provide real-time data on the performance of any communication driver. All read and write operations can be viewed in the diagnostic display window of KEPServerEX or can be tracked directly in your OPC client application by using its built-in diagnostic tags. The diagnostic display window also provides a real-time protocol view. Given that KEPServerEX is on-line full time, you can view the real-time protocol window while you make changes to key communications parameters. As you make changes to your communications parameters you'll see the effect on communications in real-time, and once you set the correct communication and device settings, you'll immediately see the exchange of data with your device.

### OPC Quick Client

KEPServerEX includes an extensive OPC Quick Client application to aid in the development of your OPC applications. The OPC Quick client has multiple built-in test modes that will exercise your KEPServerEX application. Comprehensive error reporting helps diagnose common OPC Client/Server issues.

### OPC Client Examples

All PointScan series I/O ship with a free version of KEPServerEX that will remain active for 2 hours (before requiring system re-boot). Also included are sample OPC-based applications for DASyLab®, LabVIEW®, and Visual Basic®. Source code and documentation are also provided.

### Specifications

**Communication Interfaces:** Ethernet is standard. Contact factory for information on RS-232 and RS-485 configurations

#### System Requirements

##### Minimum Requirement

**Operating System:** Windows 98  
**Processor:** Pentium 200 MHz  
**Ram:** 32 MB  
**Disk Space:** 10 MB

##### Recommended System Requirements

**Operating System:** Windows NT 4.0 SP5 or better  
**Processor:** Pentium 400 MHz or better  
**Ram:** 128 MB min  
**Disk Space:** 10 MB free

**Notes:** While KEPServerEX will run on Windows® 95/98 we strongly recommend the use of either Windows NT 4.0 SP5 or Windows 2000 for use in industrial applications. Windows NT/2000 are not only more robust, they also provide a 5 to 10 fold increase in OPC Client/Server performance over Windows 95/98. Windows NT/2000 also have better handling of serial communications ports and ethernet sockets.

### Ordering Information

Description	Part No.
KEPServer OPC server software and license for one workstation (PC) and unlimited PointScan series I/O modules	KEPServerEX
KEPServer OPC server software and license for one workstation (PC) and up to 4 PointScan series I/O modules	KEPServerEX Lite

### Related Products

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