

Best-In-Class Software Offers Simplified Programming for Drives

DriveTools™ SP Software v3.01



DriveExecutive™ Software

- Easy online and offline programming
- Windows® Explorer-style navigation
- Helpful dialogs and wizards



DriveObserver™ Software

- Online, real time drive data collection and display
- Offline data viewing
- Convenient data display options

DriveTools SP Highlights

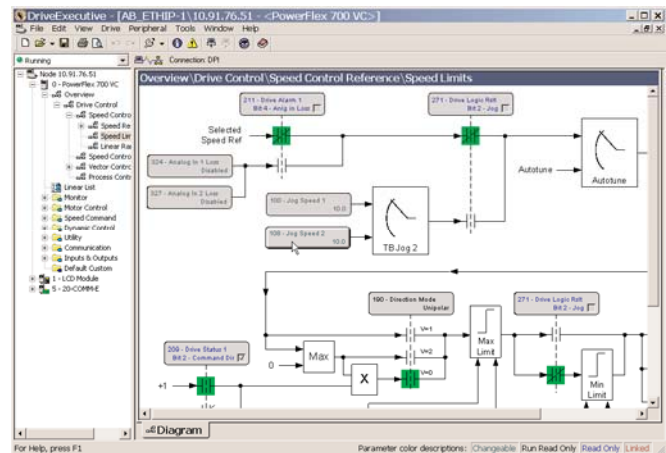
- Intuitive user interface with integrated HTML Help™ architecture providing application help, parameter help, and fault help
- Optimized communication allows for simultaneous use of DriveExecutive and DriveObserver

Supported Products

- Support for PowerFlex® 4, 40, 400, 70, 700, 700H, 700S and 7000 drives and peripherals
- Support for SCANport™ products and peripherals
- Support for the SMC™ Flex
- Support for the 1395 Digital DC drive on ControlNet and DataHighway Plus

Communications

- Serial point-to-point
- Ethernet direct
- DeviceNet™ direct
- ControlNet™ direct
- DataHighway Plus™ direct
- RSLinx® gateway
- RSLogix™ 5000 and SLC-505 backplanes (bridging) as supported by the hardware
- Integrated communication using RSLinx and RSWho™ – No separate DriveTools communication set-up and no KT Port Mapping



PC Requirements

To install the software, you will need a Pentium 100MHz processor with at least 32 MB of RAM (128MB or more is recommended), 90 MB of available hard disk space (more space may be required for specific application features), a 16-color SVGA display with 800x600 or greater resolution, and a mouse or other Windows-compatible pointing device. This version will not run on Alpha, MIPS, or Power PC processors.

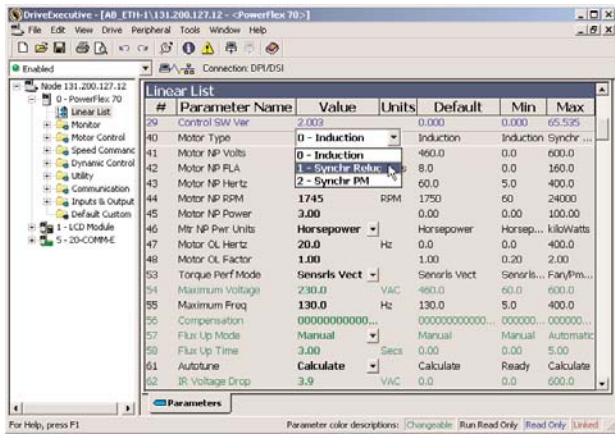
Microsoft® Internet Explorer™ version 6.0 (included on CD) or later and a compatible version of RSLinx Lite (included on CD) must be installed on your PC prior to installing a DriveTools SP application.

DriveTools SP is supported in the following environments as described:

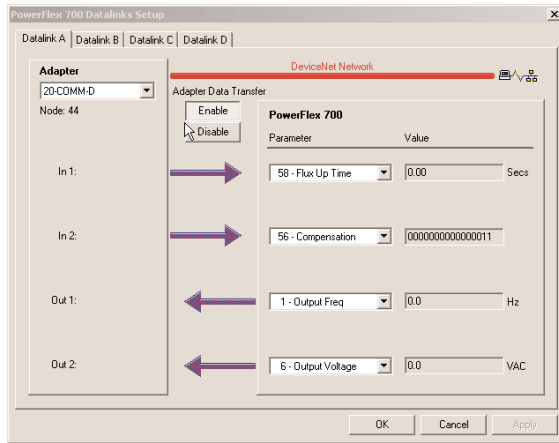
Software	Win 98 ⁽¹⁾ , Win ME	Win NT ⁽²⁾ , Win 2000 ⁽³⁾ , Win XP ⁽⁴⁾
DriveExecutive Lite	Yes	Yes
DriveExecutive	Yes	Yes
DriveTools SP (DriveExecutive + DriveObserver)	No	Yes

1. DriveExecutive requires Windows 98 Second Edition.
2. DriveTools SP requires Windows NT Version 4.0 with Service Pack 6a or later.
3. DriveTools SP requires Windows 2000 with Service Pack 3 or later.
4. DriveTools SP requires Windows XP with Service Pack 1 or later.





In-Grid or dialog based editing



Datalink set up dialog

Features by Version

Feature	DriveExecutive	DriveExecutive Lite
Online/offline editing of parameters & links	✓	✓
Saving and downloading of files	✓	✓
Printing	✓	✓
Customizable parameter table	✓	✓
Support for PowerFlex and SCANport products and adapters	✓	✓
RSLinx-based communication	✓	✓
Parameter help	✓	✓
Undo/redo of edits	✓	✓
Support for faults, alarms, events	✓	✓
Datalinks set up dialog	✓	
Parameter find	✓	
Parameter and link compares	✓	
Support for diagnostic items	✓	
Diagram views	✓	
Creation of online shortcut files	✓	

DriveExecutive Software

DriveExecutive software takes advantage of the best features of both DriveManager32™ and DriveExplorer™ software by implementing powerful multi-drive views, simple communication set up, and Windows Explorer-style navigation.

DriveExecutive software is available in two versions:

- DriveExecutive – a full-featured software package sold separately and as part of the DriveTools SP suite.
- DriveExecutive Lite – a special version with limited features that is bundled with some Rockwell Software products, such as RSLogix 5000 Full/Standard/Professional and RSNetwork™ MD.

Product Highlights

- Diagram views for PowerFlex 40, PowerFlex 700 VECTOR, PowerFlex 700S, 1336 FORCE, 1395 Digital DC Drive, and 2364F RGU bus supplies.
- In-grid and dialog based parameter editing.
- Parameter find (Ctrl + F) searches parameter number, name, and units.
- View multiple online and offline drive configurations simultaneously using multiple drive windows.
- Immediate visual indication of drive and communication status for online drives.
- A drop-down box provides immediate status at a glance.
- Intuitive wizards and set up dialogs.
- Customizable user display.
- Lists of most recent files and connections in the File menu.

File Support

- DriveExecutive automatically generates new databases for new firmware revisions.
- Upload and download drive and peripheral configurations to preserve user data and quickly commission replacement drives.
- All data for a single node (drive plus peripherals) is stored in a single file that can be shared with other DriveExecutive users.
- Any DriveExecutive user can open a DriveExecutive file. All necessary data is embedded into the file for easy transport to other PCs.
- DriveExecutive can import/export DriveManager32 revision 2.50 parameter files and can use DriveManager32 databases for offline programming.
- DriveExecutive can import DriveExplorer revision 2/3/4 files and can export DriveExplorer revision 3.02 and 4.03 files.

Diagnostics

- Display of faults, alarms, and events with product content from the user manuals.
- The compare wizard shows the differences between two online/offline configurations or between a configuration and defaults. It gives you the power to make two configurations the same.
- Displays device diagnostic items.
- Integrated flash update tool.

DriveObserver Software

DriveObserver software provides a straight-forward interface for creating new charts, collecting data, saving data, and viewing data. DriveObserver software takes advantage of the RSTrendX control (which supports up to 100 traces) to provide powerful user options.

Product Highlights

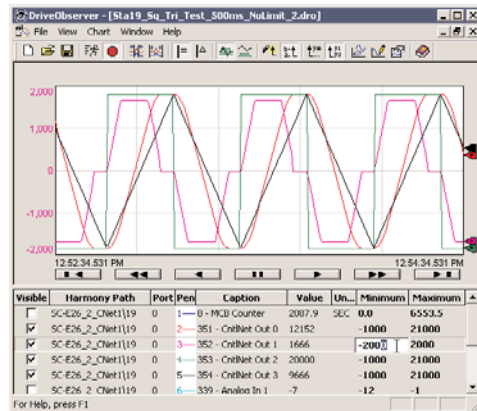
- DriveObserver is designed to co-exist with DriveExecutive and automatically knows about all the online connections currently open in DriveExecutive.
- DriveObserver charts parameter values.
- Data files save the most recently collected data and chart set up so you can either view data offline or use the same file to collect more data.
- Integrated parameter information and help.
- Ability to reconfigure existing charts by adding/removing parameters, adjusting sampling rate, or changing amount of data to record to file.
- View status for each drive in the chart at a glance.

Real-Time Data Collection

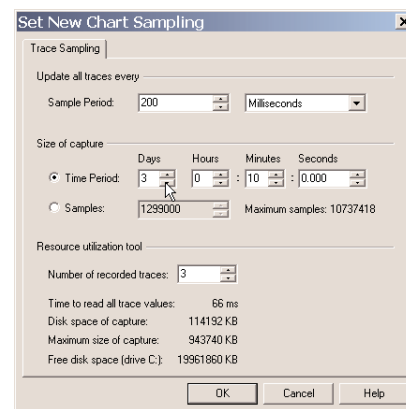
- Use in-grid or property dialogs to change minimum and maximum ranges while collecting data.
- Collect data from multiple drive nodes on the same chart.
- Collect data on multiple charts simultaneously.
- The software tests data collection rates and notifies you if changes are made.
- Choose the amount of data to keep in memory: last 10 minutes, last day for overnight collection, last three days for weekend collection, a particular quantity of samples, etc.
- Export data via a Save to *.csv for use with MS-Excel and other third-party software.
- Pause the display for closer inspection of data while still collecting data using the handy VCR buttons beneath the chart.
- Add non-recorded parameters to a chart for easy editing of Gains and other drive values while recording data.

Data Display Options

- Isolated and non-isolated display options. Isolated means that traces have individual Y-axes. Non-isolated means that traces use the same Y-axis.
- Automatic or preset Y-axis scaling. Preset scaling uses the minimum and maximum values that you choose.
- Individual or same Y-axis scaling.
- Zoom in/out on the time axis.
- Change trace formatting and/or assign markers to see the difference between data points and interpolation.
- Use the value and delta bars to view values at a given point in time or the differences between two points in time, respectively.
- Make individual traces visible/in-visible as desired to make data viewing easier.



A picture is worth a thousand words - real time data collection of parameters



Select a sampling rate and amount of data to retain

Sample Data Collection Rates

Data collection rates are approximated and then tested by DriveObserver prior to starting data collection. Data collection is dependent on:

- The method of communication (serial, Ethernet, DeviceNet, etc.)
- The rate of the communication method (serial baud rate, network baud rate, etc.)
- Bandwidth available on the communication media for explicit messaging.
- Speed, RAM, and available bandwidth on your PC. Other applications running on your PC may affect PC bandwidth and data collection rates.

On a 1.8 GHz laptop with 512MB RAM, data collection from a PowerFlex 70 via a serial connection of 38.4 kBaud was:

- Two 16-bit parameters from 160-200mS
- Four 16-bit parameters from 300-340mS

On the same laptop with a 100MHz Ethernet connection, data collection from a PowerFlex 70 was:

- Two 16-bit parameters from 80-100 mS
- Four 16-bit parameters from 150-200 mS

Network Connectivity

	DSI compatible devices (7)	DPI™ compatible device (1)	PowerFlex 700S DriveLogix drive (2)	ControlLogix™ drive modules	SCANport compatible device (3)	1336 FORCE drive (5)	1395 Digital DC Drive (8)	160 SSC™	User PC
ControlLogix Gateways (Ethernet, ControlNet, DeviceNet, DataHighway Plus™)	Equipment depends on network to which the device is connected							N/A	Equipment depends on network to which the device is connected
ControlNet Direct	N/A	20-COMM-C adapter	1788-CNC, 1788-CNCR, 1788-CNF, or 1788-CNFR & cables	N/A	1203-CN1 (Ver 1.002 or later) and 1202 cable	ControlNet Adapter (1336T-GT3EN), Repeater Adapter (1786-RPA), and Fiber Module (1786-RPFM)	ControlNet Adapter 1395-KP54EN, Repeater Adapter 1786-RPA, and Fiber Module 1786-RPFM	N/A	1784-KTC, -KTCX, -PCC, or -PCIC
Ethernet to ControlNet Direct									Client: Ethernet running TCP/IP; Server: Ethernet running TCP/IP and 1784-KTC, -KTCX, -PCC, or -PCTX
RS-232 to ControlNet Direct									RS-232 serial port and 1770-KFC
DeviceNet Direct	22-COMM-D adapter	20-COMM-D adapter (Ver 1.006 or later)	N/A	2100-GK61, 1336-GM5/1203-GK5 (Ver 2.001 or later), or 1336-GM6/1203-GU6 (Ver 2.001 or later) & cables	N/A	N/A	N/A	1784-PCD, -PCIDS, or -PCID	
RS-232 to DeviceNet Direct (6)								RS-232 serial port and 1770-KFD	
RS-232 Serial Point-to-Point	22-SCM-232 adapter	1203-SSS (Ver 3.004 or later) & cables	N/A	1203-SSS or 1203-GD2/1336-GM2 (Ver 2.07 or later) & cables	N/A	160-RS1 & cable	N/A	RS-232 serial port	
Ethernet to RS-232 Serial Point-to-Point (RSLinx Gateway)								Client: Ethernet running TCP/IP; Server: Ethernet running TCP/IP and RS-232 serial port	
Modem (4)	22-SCM-232 adapter, 9300-RADKIT, 9300-RADES, 9300-RAPMKIT modem kit, & cables	1203-SSS (Ver 3.004 or later) adapter, modem kit & cables	N/A	1203-SSS or 1203-GD2/1336-GM2 (Ver 2.07 or later) adapter; 9300-RADKIT, 9300-RADES, 9300-RAPMKIT modem kit & cable	N/A	N/A	N/A	9300-RADKIT, 9300-RADES, 9300-RAPMKIT modem kit and RS-232 serial port	
EtherNet/IP Direct	22-COMM-E adapter	20-COMM-E adapter	1788-ENBT	N/A	1203-EN1 adapter & cables	N/A	N/A	Client: Ethernet running TCP/IP	
DataHighway Plus™ Direct	N/A					PLC® Communications Adapter (1336T-GT1EN)	Multi Comm Adapter 1395-KP51	N/A	1784-KT, -KTX, -KTXD, or -PCMK
RS-232 to DataHighway Plus™ Direct									RS-232 serial port
Ethernet to DataHighway Plus™ Direct (RSLinx Gateway)									Client: Ethernet running TCP/IP; Server: Ethernet running TCP/IP and 1784-KT, -KTX, -KTXD, or -PCMK

- (1) DPI compatible devices: PowerFlex 70, PowerFlex 700, PowerFlex 700S, PowerFlex 700H, PowerFlex 700S/DriveLogix, PowerFlex 7000. The PowerFlex 700S/DriveLogix is a DPI compatible device, however, additional NetLinx connection options are available. Therefore, both "DPI compatible device" and "PowerFlex 700S/DriveLogix" columns apply to the PowerFlex 700S/DriveLogix.
- (2) Options in the "PowerFlex 700S/DriveLogix" column only apply to PowerFlex 700S drives that have the DriveLogix controller installed.
- (3) SCANport compatible devices: 1305, 1336 PLUS, 1336 PLUS II, 1336 SPIDER, 1336 IMPACT™, 1336 FORCE™, 1336 REGEN, 1397, 1557, 2364F RGU, SMC™, and SMP™. The 1336 FORCE is a SCANport compatible device, however, additional connection options are available. Therefore, both "SCANport compatible device" and "1336 FORCE" columns apply to the 1336 FORCE drive.
- (4) A total of two supported modems are required, one at the drive and one at the PC. The 1203-RAD kit contains two modems; the 1203-RAD1 kit contains one modem.
- (5) 1336 FORCE drives with firmware version 2.xx or later are supported.
- (6) Not recommended due to limited bandwidth in the 1770-KFD causing slower communication performance.
- (7) DSI compatible devices: PowerFlex 4, 40 and 400. Some DSI products do not support network adapters.
- (8) For serial connectivity to the 1395, use DriveTools32.

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