Intelligent Operator Panels

Enabling Flexible Connectivity through Powerful Solution-oriented Software

- Introduction
- Product Portfolio
- Features & Functions
- Software Features
- Successful Applications

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com/eA

WebOP Series

To satisfy the stringent standards required in the automation market, especially packaging, label slitting, and motion-based robot dispensing, Advantech offers the Operator Panels which are designed with RISC platform. To fulfill different applications, Advantech provides Real-Time OS and built-in Microsoft® WinCE 6.0 OS platform which bundles WebOP Designer and lets the Operator Panels become a control HMI for flexible system integration. WebOP Designer 2.0 is a software development tool which involves the use of PLCs and helps create application solutions for labor-saving, improves efficiency of manufacturing and easy control of every machine in the factory. Advantech Operator Panels also support a variety of LCD sizes from 3.5" to 15" and are suitable for any PLC applications, and the use of different motion/thermal controllers, inverters and sensors.

WebOP-3070T WebOP-3100T WebOP-3120T WebOP-3150T

WebOP-2040T WebOP-2050T WebOP-2070T WebOP-2080T WebOP-2100T

Industrial Applications

- Focuses on textile, packaging and pharmaceutical applications
- Wide market coverage in Building Automation, with BACNet MSTP & BACNet TCP/IP

Hardware & Communication

- Compact, flat-sealed with IP66
- Support Ethernet-based operator data acquisition and bi-directional control
- Data acquisition and bi-directional control through real time communication
- Support various communication links

HMI Development Software

- Free software development kit
- Supports Windows XP/Vista/7
- Communicates with SCADA software to create a complete automation solution

Technical Support

- Supports PLC driver programming
- Online Web-based technical document sharing
- FAQ, Forum, Mini-site
- Web-based online training

WebOP-2000/3000 Series Selection Guide




Model		WOP-3070T	WOP-3100T	WOP-3120T	WOP-3150T
Ordering Information		WOP-3070T-C4AE	WOP-3100T-C4AE	WOP-3120T-C4AE	WOP-3150T-C4AE
CPU		RISC 32 bits, 600 MHz (ARM® Cortex™-A8)			
Backup Memory		FRAM 1M bit (=128K Byte, 64word)			
Working Memory		DDR2 256M Bytes			
Storage		512MB on board SLC type			
Operating System		Microsoft® Windows CE 6.0			
Display	Type	WVGA(16:9) TFT LCD	WSVGA(16:9) TFT LCD	XGA TFT LCD	XGA TFT LCD
	Size	7"	10.1"	12"	15"
	Max. Resolution	800 x 480	1024 x 600	1024 x 768	1024 x 768
	Max. Colors	65,536 colors	65,536 colors	65,536 colors	65,536 colors
	Luminance (cd/m2)	500	550	500	400
	Viewing Angle (H/V°)	140/120	140/110	160/140	160/140
	Backlight Life (hr)	LED, 50,000	LED, 50,000	LED, 50,000	LED, 50,000
	Dimming	Adjustable	Adjustable	Adjustable	Adjustable
Touchscreen		5 wire Analog Resistive	5 wire Analog Resistive	5 wire Analog Resistive	5 wire Analog Resistive
Power-On LED		Yes	Yes	Yes	Yes
Communication LED		No	No	No	No
Front USB Access		No	No	No	No
Communication Interface	COM1	RS-232/RS-422/RS-485 (DB9)	RS-232/RS-422/RS-485 (DB9)	RS-232/RS-422/RS-485 (DB9)	RS-232/RS-422/RS-485 (DB9)
	COM2	RS-422/RS-485 (Terminal 4pin+Ground)	RS-422/RS-485 (Terminal 4pin+Ground)	RS-422/RS-485 (Terminal 4pin+Ground)	RS-422/RS-485 (Terminal 4pin+Ground)
	COM3	RS-485 (Termianl 2pin)	RS-485 (Termianl 2pin)	RS-485 (Termianl 2pin)	RS-485 (Termianl 2pin)
	CAN	Termianl 2pin	Termianl 2pin	Termianl 2pin	Termianl 2pin
	Ethernet (RJ45)	10/100-BaseT	10/100-BaseT	10/100-BaseT	10/100-BaseT
I/Os	USB Client	USB 2.0 Client x 1	USB 2.0 Client x 1	USB 2.0 Client x 1	USB 2.0 Client x 1
	USB Host	USB 2.0 Host x 1 (Top)	USB 2.0 Host x 1 (Top)	USB 2.0 Host x 1 (Top)	USB 2.0 Host x 1 (Top)
	Micro-SD Slot	Yes	Yes	Yes	Yes
	SD Slot	-	-	-	-
	Audio	1 Lin out / 1 Mic in	1 Lin out / 1 Mic in	1 Lin out / 1 Mic in	1 Lin out / 1 Mic in
	Power Isolation	Yes	Yes	Yes	Yes
	I/O Isolation	Yes	Yes	Yes	Yes
Power Supply Voltage		24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%
Power Consumption		7W Typical	9W Typical	12W	14W
Dimensions W x H x D (mm)		203.4 x 150 x 43.7 mm (8.01" x 5.91" x 1.72")	271.5 x 213.5 x 43.2 mm (10.69" x 8.41" x 1.7")	311 x 237 x 46.8 mm (12.24" x 9.33" x 1.84")	386 x 310 x 46.8 mm (15.20" x 12.2" x 1.84")
Cut-out Dimensions W x H (mm)		192 x 138.5 mm (7.56" x 5.45")	259.5 x 201.5 mm (10.22" x 7.93")	302.5 x 228.5 mm (12.1" x 9.14")	374.5 x 298.5 mm (14.74" x 11.75")
Front Panel thickness (mm)		6 mm	6 mm	6 mm	6 mm
Enclosure		Die-cast aluminum alloy front bezel	Die-cast aluminum alloy front bezel	Die-cast aluminum alloy front bezel	Die-cast aluminum alloy front bezel
Net Weight		1 Kg (2.20 lbs)	1.2 Kg (2.65 lbs)	2.5 kg (5.51 lb)	3 Kg (6.61 lbs)
Operating Temperature		-20 ~ 60°C (-4 ~ 140° F)	-20 ~ 60°C (-4 ~ 140° F)	-20 ~ 60°C (-4 ~ 140° F)	-20 ~ 60°C (-4 ~ 140° F)
Storage Temperature		-30 ~ 70°C (-22 ~ 158° F)	-30 ~ 70°C (-22 ~ 158° F)	-30 ~ 70°C (-22 ~ 158° F)	-30 ~ 70°C (-22 ~ 158° F)
Humidity		10% ~ 90% RH @ 40° C, non-condensing	10% ~ 90% RH @ 40° C, non-condensing	10% ~ 90% RH @ 40° C, non-condensing	10% ~ 90% RH @ 40° C, non-condensing
Ingress Protection		Front panel: IP66	Front panel: IP66	Front panel: IP66	Front panel: IP66
Certification Approval		CE / FCC / BSMI / CCC / UL / UL-508	CE / FCC / BSMI / CCC / UL / UL508	CE / FCC / BSMI / CCC / UL	CE / FCC / BSMI / CCC / UL





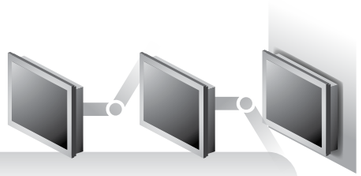
WOP-2040T		WOP-2050T	WOP-2070T		WOP-2080T		WOP-2100T	
WOP-2040T-S1AE	WOP-2040T-N1AE	WOP-2050T-S1AE	WOP-2070T-S2AE	WOP-2070T-N2AE	WOP-2080T-S2AE	WOP-2080T-N2AE	WOP-2100T-S2AE	WOP-2100T-N2AE
RISC 32bits, 200MHz		RISC 32bits, 200MHz	RISC 32bits, 200MHz		RISC 32bits, 200MHz		RISC 32bits, 200MHz	
128KB		128KB	128KB		128KB		128KB	
32 MB SDRAM		32 MB SDRAM	64 MB SDRAM		64 MB SDRAM		64 MB SDRAM	
8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash	8MB NOR Flash
-	128M NAND Flash	128M NAND Flash	-	128M NAND Flash	-	128M NAND Flash	-	128M NAND Flash
HMI RTOS, WebOP Designer 2.0		HMI RTOS, WebOP Designer 2.0	HMI RTOS, WebOP Designer 2.0		HMI RTOS, WebOP Designer 2.0		HMI RTOS, WebOP Designer 2.0	
WQVGA(16:9) TFT LCD		Similar QVGA TFT LCD	WVGA(16:9) TFT LCD		SVGA TFT LCD		Similar WSVGA TFT LCD	
4.3"		5.6"	7"		8"		10.1"	
480 x 272		320 x 234	800 x 480		800 x 600		1024 x 600	
65,536 colors		65,536 colors	65,536 colors		65,536 colors		65,536 colors	
400		330	300		250		250	
100/95		130/110	140/130		140/130		140/110	
LED, 20,000		LED, 20,000	LED, 20,000		LED, 30,000		LED, 20,000	
Adjustable		Adjustable	Adjustable		Adjustable		Adjustable	
4 wires Analog resistive		4 wires Analog resistive	4 wires Analog resistive		4 wires Analog resistive		4 wires Analog resistive	
Yes		Yes	Yes		Yes		Yes	
No		No	No		No		No	
No		No	No		No		No	
RS232/422/485 (DB9 Female)		RS232/422/485 (DB9 Female)	RS232/422/485 (DB9 Female)		RS232/422/485 (DB9 Female)		RS232/422/485 (DB9 Female)	
RS422/485 (5 Pin Plug Connector)		RS422/485 (5 Pin Plug Connector)	RS422/485 (5 Pin Plug Connector)		RS422/485 (5 Pin Plug Connector)		RS422/485 (5 Pin Plug Connector)	
RS232 (COM1: Pin5;7;8)		RS232 (COM1: Pin5;7;8)	RS232 (COM1: Pin5;7;8)		RS232 (COM1: Pin5;7;8)		RS232 (COM1: Pin5;7;8)	
-	-	-	-	-	-	-	-	-
-	10/100-BaseT	-	-	10/100-BaseT	-	10/100-BaseT	-	10/100-BaseT
Yes		Yes	Yes		Yes		Yes	
Yes		Yes	Yes		Yes		Yes	
-	Yes	Yes	-	Yes	-	Yes	-	Yes
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%	24VDC ± 10%
5W		10W	10W		10W		10W	
130 x 106.2 x 36.4mm (5.11" x 4.18" x 1.43")		188 x 143.3 x 30mm (7.4" x 5.64" x 1.18")	188 x 143.3 x 30mm (7.4" x 5.64" x 1.18")		231.5 x 174.6 x 37mm (9.11" x 6.87" x 1.46")		269.8 x 212 x 37.4mm (10.62" x 8.35" x1.47")	
118.5 x 92.5mm (4.66" x 3.64")		175 x 132.5mm (6.89" x 5.21")	175 x 132.5mm (6.89" x 5.21")		221 x 164 mm (8.70" x 6.46")		259.5 x 201.5 mm (10.22" x 7.93")	
5 mm		6 mm	6 mm		6 mm		6 mm	
PC + ABS	PC + ABS	PC + ABS	PC + ABS	PC + ABS	PC + ABS	PC + ABS	PC + ABS	PC + ABS
0.3 kg (0.66 lbs)		0.51 kg (1.12 lbs)	0.6 kg (1.32 lbs)		0.93 kg (2.05 lbs)		1.2 kg (2.64 lbs)	
0 ~ 50°C (32 ~ 122° F)		0 ~ 50°C (32 ~ 122° F)	0 ~ 50°C (32 ~ 122° F)		0 ~ 50°C (32 ~ 122° F)		0 ~ 50°C (32 ~ 122° F)	
-20 ~ 60°C (-4 ~ 140° F)		-20 ~ 60°C (-4 ~ 140° F)	-20 ~ 60°C (-4 ~ 140° F)		-20 ~ 60°C (-4 ~ 140° F)		-20 ~ 60°C (-4 ~ 140° F)	
10% ~ 90% RH @ 40° C, non-condensing		10% ~ 90% RH @ 40° C, non-condensing	10% ~ 90% RH @ 40° C, non-condensing		10% ~ 90% RH @ 40° C, non-condensing		10% ~ 90% RH @ 40° C, non-condensing	
Front panel: IP66		Front panel: IP66	Front panel: IP66		Front panel: IP66		Front panel: IP66	
CE / FCC / BSMI / CCC / UL		CE / FCC / BSMI / CCC / UL	CE / FCC / BSMI / CCC / UL		CE / FCC / BSMI / CCC / UL		CE / FCC / BSMI / CCC / UL	

WebOP Series Features

With RISC-based processors up to 600MHz, the WebOP series supports a variety of LCD sizes from 3.5" to 15" and are highly suited for applications involving the use of PLCs, motion/thermal controllers, and are highly suited for applications involving the use of PLCs, motion/thermal controllers, inverters and sensors. With various communication interfaces, including RS-232/422/485, Ethernet and USB ports, the WebOP series can easily connect to a variety of equipment. Furthermore, these products include IP66 protection and 0 ~ 50°C operating temperatures to ensure reliable performance in the most demanding environments. Compatible with over 300 of the most popular PLCs on the market, including: Allen Bradley Micrologix, Modicon. Quantum, GE 90, Siemens AG Simatic S7, Mitsubishi. FX/Q, Omron Sysmac C/CV/CS/CJ, and Yaskawa MP, the WebOP series and WebOP Designer 2.0 provide an outstanding price/performance ratio for a variety of factory automation needs.

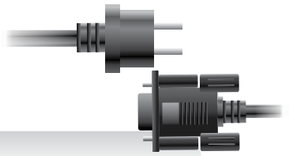
Complete Range of LCD Sizes
Supports a variety of LCD sizes from 3.5" to 12.1" and are highly suited for applications involving the use of PLCs.

Level 4 ESD Protection
Air Discharge 15KV Level 4; Contact Discharge 8KV Level 4.



VESA & Wall mounting kits
One kit for different applications.

Powerful Memory Design
512MB on board SLC type storage, 128KByte Backup FRAM and no battery issue concerns.

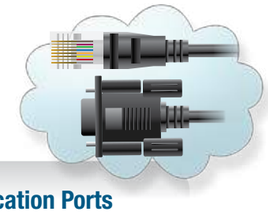


Independent isolation design
Outside inrush current & electronics noise protection.

Built-in CANBus function
Support for CANopen library registered by CiA 301 V4.02.

Micro SD Data Storage
All WebOP-T series products have built-in a standard Micro SD slot for static data storing use.

Waterproof / IP66 Protection
All models support IP66 protection and 0 ~ 50°C operating temperature range.

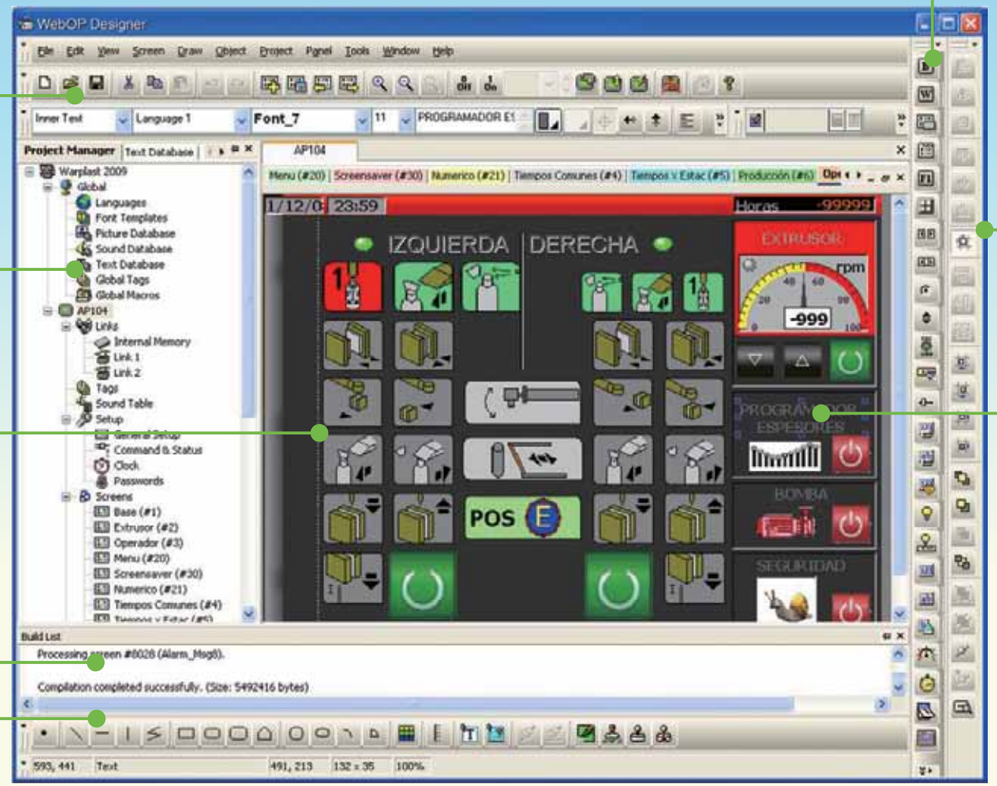


Multiple Communication Ports
With various communication interfaces, including RS-232/422/485, Ethernet and USB Host/Client ports.

PLC Connectivity
Compatible with over 300 of the most popular PLCs on the market for a variety of factory automation needs.

HMI Development Software - WebOP Designer

WebOP Designer is proven in many application fields and is an easy to use integrated development tool featuring solution-oriented screen objects, high-end vector graphics, Windows fonts for multi-language applications, recipes, alarms, data loggers and operation logging. WebOP Designer also includes online/offline simulation and other utility programs such as Data Transfer Helper (DTH); recipes editors and text editors. WebOP runtime, a part of WebOP Designer, guarantees reliability and performance because of the minimum system overhead, high communication data rates, sub-second screen switching and 24/7 operation.



Shortcut & Execution Toolbar

Icon Display Improves Work Efficiency

- Shortcut icons designed to show objects, figure type, and operations improving work efficiency.
- Frequently used objects and figures can be registered as Favorites.

Project Workspace

An Intuitive Tree Display Makes Runtime Development Easy

Easy to create, develop, and manage project property efficiency by project-based management worksheets.

Screen Design Worksheet

Smart Screen Design

Easy to view screens during runtime development, adjustable based on user-oriented application.

Message Build List

Compile & Simulate Results

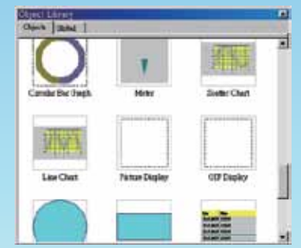
By double clicking on the error message after compilation it will automatically jump to the place where the problem is.

Draw Toolbar

A variety of drawing tools empower developers to create expansive applications.

Object Toolbar

Registered Components Display



Designing screens is made easy by selecting components from the image list and putting them on the drawing screen.

Edit Toolbar

Dedicated Component Editing Screen

- A component editing screen appears by double-clicking a registered component within the library workspace.
- Editing registered components is quick and easy.

Dialog Box

- The attribute screen is displayed by double-clicking the object or figure.
- Figure changes are immediately reflected onscreen, thereby simplifying the process and reducing setting errors.
- Easy to set the properties through pop-up dialog box.

Software Features

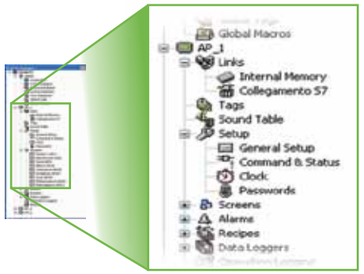
- Allow users to switch multi-language UI dynamically, with Unicode and multilingual screen text supported.
- Provide password protection of designs, macros and upload/download operations.
- Provide index registers for modifying device addresses at runtime.
- Operation log helps the review and investigation of important events.
- Allow downloads of runtime data using serial port, Ethernet, USB and Micro-SD.
- Allow the use of USB memory sticks or Micro-SD for trouble-free application updates.
- Supports over 300 industrial communication protocols, such as SIMATIC S7-1200, BACNet MSTP/BACNet IP, and more.

WebOP Designer Software

Efficient Project-based Structure to Manage Multiple Applications

Project manager

- One project can have many applications.
- The project tree provides all you need to manage a project.
- Global settings and resources sharable to all applications in a project.
- You can make the most out of existing projects by importing / exporting functions for all kinds of settings.
- Containing entire project in one file makes the maintenance job easy.



Software Functions to Meet Various Machine Automation Needs

Possible to achieve a mini-SCADA system

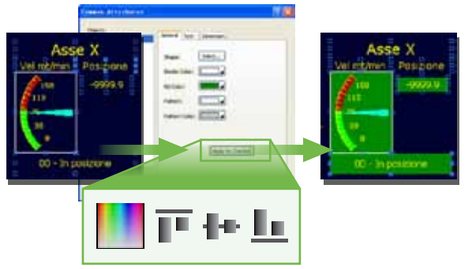
- You can have the following for an application:
- 10 sets of text to support multiple languages.
- 4 communication links with the option to add more
- RS-485 and TCP/IP sub-links.
- 7999 screens.
- 1 startup macro; 1 main macro; 4 event macros, 4 time macros, no limitation on other kinds of macros
- 16 discrete alarm, analog alarm, recipe block and data loggers. data logger
- 1 operation logger.

User Friendly Tools to Make Customized Designs Easier and More Efficient

Screen editor and toolbars

- Real-time WYSIWYG allows you to see the change of object appearance at any time.
- Property dialogs with semi-transparent features will not block your view to screen objects anymore.
- Automatic size adjustment of characters and pictures according to the object size is supported.
- Group a number of objects to move, resize, and modify the common attributes.
- Rotate a picture or change its tone to fit the needs of an object.

Auto Resizing, Rotating & Tone

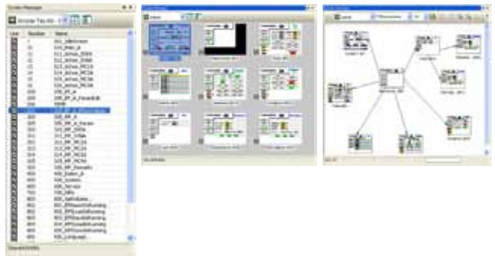


Smart Screen Management

Screen manager

- Show the screen numbers and their names of an application in a traditional text list or a thumbnail list.
- Select screens from the list to edit, cut, copy, delete, or export them.
- Create new screens and import screens can be done through a pop-up menu.
- Click on a screen thumbnail to highlight the connections of that screen with others.
- Double-click on a screen thumbnail to open that screen's editing window or property dialog.

List View *Thumbnail View* *Screen Overview*

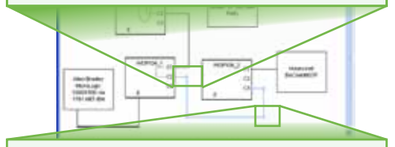


A Graphical Tool for Defining Communication Configuration

Link overview

- Depicts the communication links of all the panel applications in a project. You can easily see the panel-device connections and the panel-panel connections.
- Edit the content of the link overview to make it more readable and meaningful.
- Create panel applications and communication links. This is a way of doing top-down design on communication level.

Moving the starting terminal of a link line to a different port position changes the link port setting accordingly.



Double-click on a highlighted link line to bring up the property dialog of that link.

Display All Objects With Associated I/O Points in a List

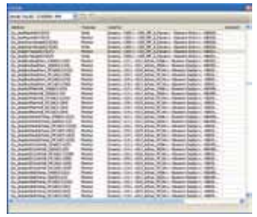
Object list

- Show all the objects of a screen with their types, IDs, and associated I/O addresses. You can edit the I/O addresses in the list directly.

Show All I/O Points With Their Purpose in A Table

Screen editor and toolbars

- Double-click on an I/O point to bring up the property dialog of that I/O point's user. It is a convenient way to view or modify the configuration of an entity associated with a certain I/O point.



Thousands of Professional Pictures to Make Screen Designs Easy and Outstanding

Picture libraries and picture database

- Famous industrial pictures from Symbol Factory are ready for use, so that making your own picture libraries is easy.

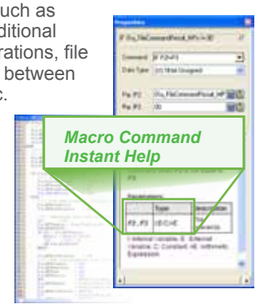
WebOP symbols (.BMP)

Easy-to-use Macro Editor and Commands

Macro editor and macro commands

- Macro editor and macro commands are useful for operations, such as sequential operations, conditional operations, interactive operations, file operations, data exchange between two connected devices, etc.

Macro Commands

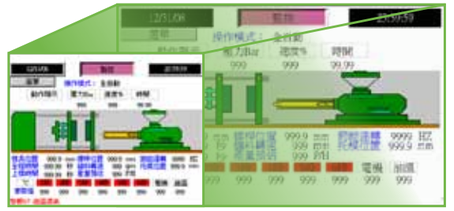


Macro Editor

Changing HMI Model Can Be Done in Seconds

Automatic size adjustment

- When changing the screen resolution, all the screen objects are automatically resized to maintain the relative positions and size ratios to the original screens.



5.7" 640x480 *7" 800x480*

WebOP Designer Software

Simple Text Mapping Table Fulfills The Needs for Multiple Languages

Text database and text editor

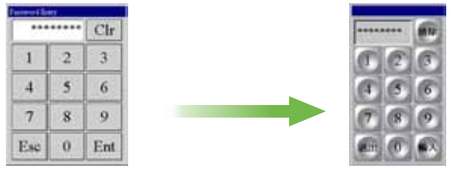
- Text database tables have multiple columns to contain strings for all supported languages with import/export functions, you can use Microsoft Excel to edit strings and import them for an application.

Import/Export from or to Excel

Customized Keypad Layouts and Designs

Custom keypads and on-screen keypads

- You can design your own keypad to make it more appealing or suitable for your requirements.
- Using on-screen keypads instead of pop-up keypads is also possible.



Custom Keypads

Secure Intellectual Properties

Design protection

- Project files, global macros, and password tables can be protected by different passwords.
- Copying and uploading of an application can be prohibited in advance.

Anti-Piracy Functions

Advanced object settings

- An allowable input range can be set for a numeric data entry object.
- Buttons, switches, and data entry objects can be disabled or hidden dynamically by the current user level or the specified bits.
- Operator confirmation can be asked for a data entry.
- Minimum holding time can be required for a button/switch.
- Advanced Numeric Display can use a macro to check the user input.

Support Dynamic Data, Scale and Time Ranges for Complicated Applications

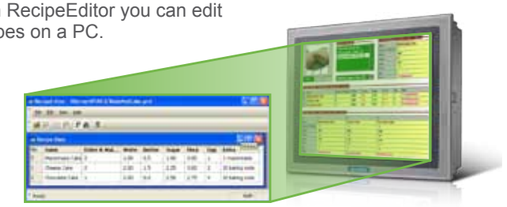
Dynamic range

- With the support of dynamic range, a screen object can adapt its display to the current range settings to show information more readable and precise.

Provide Complete Recipe Handling Functions

Recipe blocks

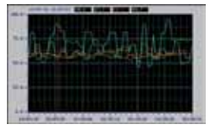
- Supports up to 16 different groups of recipes.
- Transfer of recipes between WebOP and PLCs/files is supported.
- With RecipeEditor you can edit recipes on a PC.



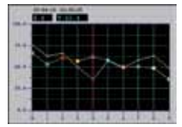
Easy to Configure Data Collections and Historic Data Displays

Data loggers

- You can save/load collected data (up to 16 different data sources) to/from a file by a function button or macro program.
- Historic Event Table displays collected data and history of predefined events in tabular form.



- Historic Trend Graph displays collected data in trend lines



- Single Record Line Chart displays the profile of one sample from a set of collected data.

Versatile Alarm Monitoring and Display Capabilities

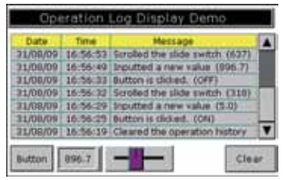
Alarm processing

- Up to 16 discrete alarm blocks and 16 analog alarm blocks can be monitored and recorded.
- Up to 8 data values can be read and recorded along with an alarm event.
- A global alarm marquee is supported.

Operations Can Be Recorded for Improving Quality and Efficiency

Operation logging

- The starting time and the stopping time of an application can be recorded.
- The failure of a communication link can be recorded.
- Operation Log Display lists the logged operations process for the operator to review.



Operation Log Display

Easy-to-Use Error Messages

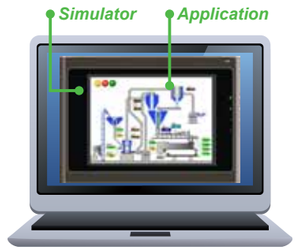
Compiler

- Check the correctness and consistency of all settings and design to optimize the communications with connected devices.
- Translate macros into compact and ready-to-execute codes.
- Build runtime data to be executed by the WebOP.

Reduce Time and Effort to Boost Performance through Advanced Simulations

Offline simulation and online simulation

- Offline simulation function can help to experience your design result even before decide to purchase this model.
- Evaluate the communication performance using online simulation before installation.



Offline Simulation

Provide Various Choices for Application Runtime Data Transfers

Data Transfer Tool & Data Transfer Helper (DTH)

- Use WebOP Designer or DTH to transfer an application's runtime data to a WebOP through a serial port, an Ethernet port, or a USB port anytime when that WebOP is running.
- Without a PC, transfer an application's runtime data to a WebOP by using an USB memory stick or MicroSD card.

HMI Runtime Software - Panel Express

PANELEXPRESS
Designed for Convenience

PanelExpress is a Windows based HMI runtime. It enables you to utilize the resources of a PC, such as computation power, multimedia, and bigger screen, to realize a high-end sophisticated HMI. Its configuration software, WebOP Designer, is also the development tool for WebOP-2000 series RTOS based HMI products. Thanks to the cross platform flexibility offered by WebOP Designer, switching hardware for the consideration of cost and performance becomes an easy job.

General Features

- Cost effective Windows based HMI runtime
- Over 50 kinds of screen objects can fulfill all types of HMI operating and viewing needs for machine automation
- Supports 16 communication links for different application
- No limitation on the internal I/O points which used in an application
- Supports over 350 PLC communication protocols
- Supports data collection, alarm monitoring, recipe handling, and history of operation logging

Advanced Features

- Number of communication links can be set up to 128
- Monitors up to 64 discrete alarm blocks and 64 analog alarm blocks. Totally up to 65535 alarms can be defined
- Supports VNC(Virtual Network Computing)
- Supports Access, My SQL, and SQL databases
- Supports Visual Basic Script

Successful Applications

A Total Automation Solution for Fiberglass Textile Machine

Introduction

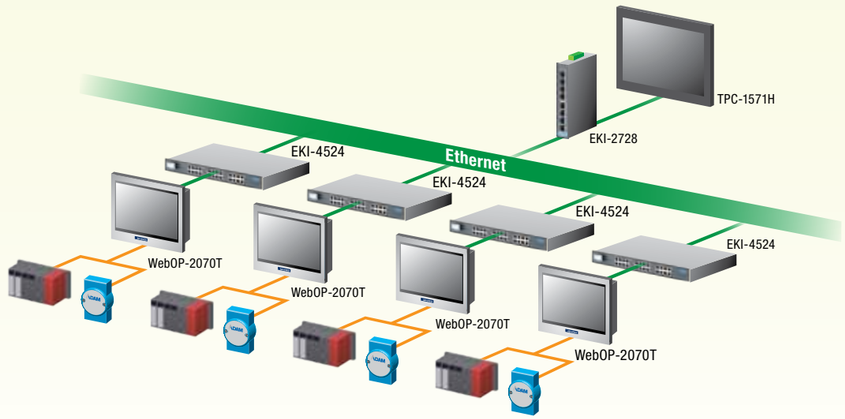
One of Southeast Asia's largest fiber glass manufacturers which is principally engaged in the manufacture and distribution of electronic-grade fiber glass yarns, industrial fiber glass yarns and electronic-grade glass fiber cloth for reinforcement and insulation materials in printed circuit boards (PCBs) was planning to raise the level of automation in production so that administrator can keep abreast of the production status while reducing handwriting errors.

System Requirements

In order to replace the original individual operating mode, the new system has to offer total solution, including a friendly terminal for textile machinery to easily control manufacturing processes, the reliable network connection to ensure accurate data transmission, a powerful computer for control center as a server to deal with large amounts of data. Apart from various devices, the HMI runtime development software to quickly design the suitable user interface for textile machinery and industrial panel PC is also a necessity for this case.

System Diagram

A total of 84 Advantech WebOP-2070T, 7" WVGA Operator Panels, were installed on the production lines to collect a variety of signals from on-site devices such as PLC, driver and stepper motor and this data can be transmitted to 15" Touch Panel Computers (TPC-1571H) in the control center via the two kinds of Ethernet Switches. The WOP-2070T provides an outstanding price performance ratio such as built-in ARM9-based RISC processors and up to 200MHz and 128MB flash memory as well as supporting hundreds of industrial communication protocols.they were bundled with WebOP Designer 2.0 which is a software development kit. The PanelExpress 2.0 is a Windows based HMI runtime and equips with the configuration software - WebOP Designer, enables users to utilize the resources of a PC and realize the high-end sophisticated HMI.



Conclusion

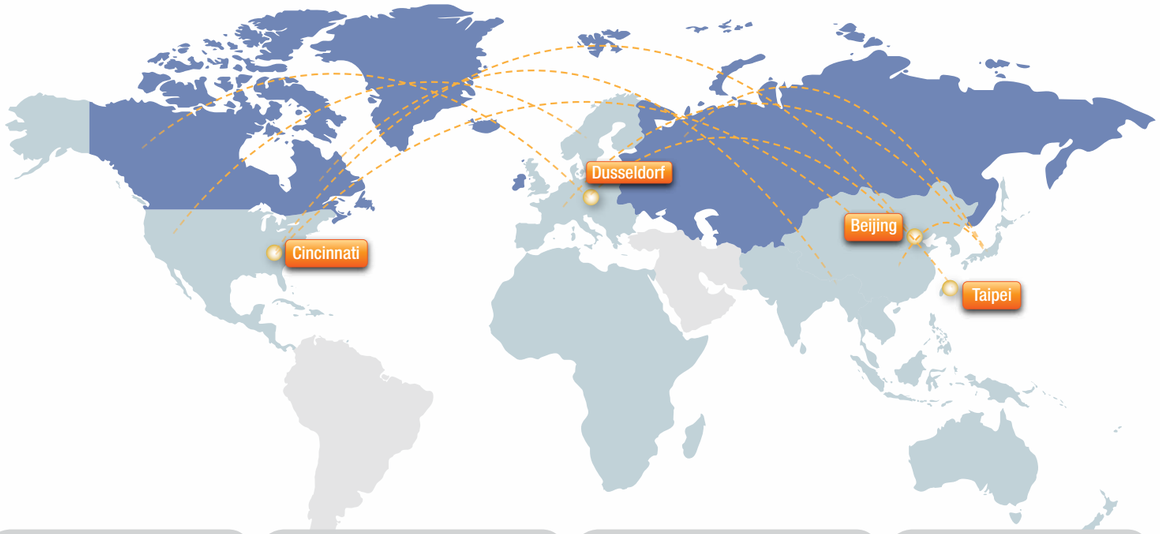
Advantech's total solution not only helps system integrators develop a brand new automation system from the stand-alone operation to an integrated solution but also allows users upgrade its management efficiency from passive maintenance to active management while reducing labor and management costs. Through the database, Advantech's solution even allows administrators to analyze its process work and quickly prioritize process improvement initiatives.

Project Implementation

Product	Description
WebOP-2070T	7" WVGA Operator Panel with WebOP Designer 2.0 Software
EKI-2728	8-port Gigabit Unmanaged Industrial Ethernet Switch
EKI-4524	24-port Ethernet Switch with Wide Temperature
TPC-1571H	15" XGA TFT LED LCD Intel Atom Dual-Core D525 Touch Panel Computer
Panel Express 2.0	Windows based HMI runtime Software

Global Technical Support Network

Providing superior self-support mechanisms is one of the most essential parts of being a top-tier automation company, and we take pride in the outstanding level of service that we offer. To best support our customers, we've created a suite of useful interactive online tools.



Integration Services | **Flexible & Cost-Effective** | **Global, High Quality Support** | **Dedicated Professionals**

Timely Service

Advantech's well-established technical support systems transform your ideas into reality and achieve highly adaptable, just-in-time response.

Local Support

With service teams in each major operating region, we support service through an extensive global network of offices and an industry-leading eBusiness infrastructure designed to provide responsive service that benefits customers anytime, anywhere.

Online Video Tutorials

This tutorial will take you step-by-step through the process and these video tutorials have been developed to help you to understand and make the best use of operator panels.Trainees get real-time integrated information.

Customized Driver Support

Even though WebOP Designer supports over 300 PLC controller drivers, some products may not be supported, but the driver list is growing everyday. Contact us for details on the driver you need.

Online Technical Support Services

WebOP Designer makes it easy to create applications with an intuitive and user-friendly interface, that is flexible and efficient between systems, machines and operators. Therefore, Advantech provides online technical support services for customers to reduce the total cost of ownership during the development and operation. Downloadable software tools and documentation makes it easy to get started. A wide selection of ready-made objects and functions make it easy to create applications through online function block example sharing. You can easily download from our web-site to shorten development time. Also, the forum community is established to encourage discussions which provides valuable information exchange.
The WebOP website contains various information which helps users to know more about WebOP. The complete range of products can be found in this website. The online community forum helps to solve the problems immediately. Tutorial video guides users to operate WebOP series products easily. The applications of the WebOP series can be found in a vertical solutions page. Users can download the latest software from the website. Users can find frequently asked questions on the webpage, or contact Advantech for helps through the WebOP mini-site. For more information, please go to official WebOP website http://www.advantech.com/webop/

Supported PLC Controllers

Direct Link (COM)

Brand	Model	PC/Simulation	WinCE(ARM)
A&D Company Ltd.	AD-4401 Weighing Indicator	CAD401.dll	CAD401_A.dll
ABIDO Automation Co., Ltd.	ACR420 984 Device/Slave (RTU)	C2C032.dll	C2C032_A.dll
ADLEE POWERTRONIC CO., LTD.	MS/AP/AS Series Inverter (RTU)	CAPINV.dll	CAPINV_A.dll
	BL/D305 Series (RTU)	CAPIPM.dll	CAPIPM_A.dll
Advantech	Null PLC	C00000.dll	C00000_A.dll
	ADAM (Modbus RTU)	C2C031.dll	C2C031_A.dll
	ADAM-4000 (ASCII)	CM4000.dll	CM4000_A.dll
AIGO Technologies Corporation	SE500 Series (Modbus RTU)	C87001.dll	C87001_A.dll
Allen Bradley	Micrologix 1000/1500	C10001.dll	C10001_A.dll
	SLC 5/03, 5/04	C10002.dll	C10002_A.dll
	DH-485 (COM)	C10003.dll	N/A
	PLC-5	C10005.dll	C10005_A.dll
	SLC 5/03, 5/04 (CRC)	C10006.dll	C10006_A.dll
	CompactLogix/ControlLogix Tag	C10101.dll	N/A
ARICO Technology	FC Type(Modbus)	Carfc01.dll	Carfc01_A.dll
Astraada HMI	Modbus Master (RTU)	C2C021.dll	C2C021_A.dll
	Modbus Device/Slave (RTU)	C2C031.dll	C2C031_A.dll
	Modicon Device/Slave (RTU, Quantum)	C2C081.dll	C2C081_A.dll
	Modbus Master (RTU; Non-volatile slave data)	C2C121.dll	C2C121_A.dll
Automation Technology Co., Ltd.	BLDC NLV/KLV Series	CAK200.dll	CAK200_A.dll
Banner Engineering Int'l Inc.	BSP01 Series	CS1011.dll	CS1011_A.dll
CAPAC	TC	CCAP01.dll	CCAP01_A.dll
CHINO Corporation	DB1000 Digital Indicating Controller (ASCII)	CCDB1k.dll	CCDB1k_A.dll
CMZ Sistemi Elettronici	NF0 Controllers	CCMZ051.dll	CCMZ051_A.dll
	FCT Controllers	CCMZ151.dll	CCMZ151_A.dll
	SD Drivers	CCMZ251.dll	CCMZ251_A.dll
	SDS Drivers	CCMZ351.dll	CCMZ351_A.dll
	MDM Drivers	CCMZ451.dll	CCMZ451_A.dll
Crouzet Ltd.	M3 SLIN/SLOUT Protocol	CC2001.dll	N/A
CTB Technologies Corporation	IMS Servo Controller	N/A	N/A
Danfoss Group	VLT 2800 Series (FC Protocol)	CDAVLT.dll	CDAVLT_A.dll
DEIF A/S	Modbus RTU (COM port)	C2C082.dll	C2C082_A.dll
	WSS/WSS-L	CDEI01.dll	CDEI01_A.dll
Delta Corporation	DVP-ES/SS/EP/EH	C16001.dll	C16001_A.dll
	DVP-ES/SS/EP/EH (No block read)	C16001.dll	C16001_A.dll
	VFD-M Inverter (ASCII)	C16011.dll	C16011_A.dll
	VFD-B Inverter (ASCII)	C16021.dll	C16021_A.dll
	DTC1000/2000 Temperature (ASCII)	C16031.dll	C16031_A.dll
	DTA Temperature (ASCII)	C16032.dll	C16032_A.dll
	ASDA-A Servo Controller (ASCII)	C16041.dll	C16041_A.dll
	ASDA-B Servo Controller (ASCII)	C16051.dll	C16051_A.dll
	ASDA-A2 Servo Controller (ASCII)	C16061.dll	C16061_A.dll
Dirise Electric Technology Co.,Ltd.	DRS2000 Series Inverter	N/A	N/A
	DRS2800 M Series Inverter	CFDSR01.dll	CFDSR01_A.dll
Emerson Network Power	EC Series (RTU)	C81001.dll	C81001_A.dll
	EV1000 Series Variable Speed Driver	C81011.dll	C81011_A.dll
Epson Corporate	Epson LQ Matrix Printer	CEPSON0.dll	CEPSON0_A.dll
Eura Drivers Electric Corp.	Eura EF1S/1N	C2B001.dll	C2B001_A.dll
	Eura EF2N	C2B041.dll	C2B041_A.dll
	Eura Inverter (Modbus RTU)	C5A003.dll	C5A003_A.dll
	Eura Inverter (Modbus ASCII)	C5A004.dll	C5A004_A.dll
	Eura EF200-CPU202(Modbus RTU)	C5A005.dll	C5A005_A.dll
	Eura EF200-CPU202XP/CPU204(Modbus RTU)	C5A006.dll	C5A006_A.dll
	Eura EF200-CPU204XP/CPU206(Modbus RTU)	C5A007.dll	C5A007_A.dll
	Eura EF300-CPU304(Modbus RTU)	C5A007.dll	C5A007_A.dll
	Eura EF300-CPU306(Modbus RTU)	C5A007.dll	C5A007_A.dll
	Eura Servo Drive (Modbus RTU)	C5A00A.dll	C5A00A_A.dll
	Eura Servo Drive (Modbus ASCII)	C5A00B.dll	C5A00B_A.dll
	Eura HFR1000 (Modbus RTU)	C5A00C.dll	C5A00C_A.dll
	Eura HFR1000 (Modbus ASCII)	C5A00D.dll	C5A00D_A.dll
	Eura HFR2000 (Modbus RTU)	C5A00E.dll	C5A00E_A.dll
	Eura HFR2000 (Modbus ASCII)	C5A00F.dll	C5A00F_A.dll
Fatek Automation Corp.	FATEK FBs/FBe	C1A001.dll	C1A001_A.dll
Festo Corporation	FPC/FEC Series	C1D001.dll	C1D001_A.dll
Fuji Electric Corporation	NB Series	C1D001.dll	C1D001_A.dll
	PXR Series Temperature (RTU)	C1D011.dll	C1D011_A.dll
	FRENIC-VP (RTU)	C1D021.dll	C1D021_A.dll
	FRENIC5000G11/P11 (Fuji)	C1D031.dll	C1D031_A.dll
	FRENIC-Mini/Eco/Multi/Mega(RTU)	C1D051.dll	C1D051_A.dll
FVK Automation Co., Ltd.	F Series Inverter	CFDSR01.dll	CFDSR01_A.dll
GE Corporation	90 Series SNP	C1E001.dll	C1E001_A.dll
	VersaMax Series (SNP)	C1E001.dll	C1E001_A.dll
	90 and RXSi Series (SNP)	C1E001.dll	C1E001_A.dll
	90 Series CCM	C1E011.dll	C1E011_A.dll
Gigarise Technology Co., Ltd.	SE5000	C87002.dll	C87002_A.dll
	GA400 Temperature (RTU)	C90012.dll	C90012_A.dll
GOFAST Corporation	NC Series	C42001.dll	C42001_A.dll
Haiwell Technology Co., Ltd	HW Series (RTU)	CHW001.dll	CHW001_A.dll
Hanbell Precise Machinery Co., Ltd.	Air Screw Compressor	CHANASC.dll	CHANASC_A.dll
Hitachi Industrial Equipment Systems Co., Ltd	SJ200 Inverter	C1F001.dll	C1F001_A.dll
	H/EH Series	C1F020.dll	C1F020_A.dll
	EH/ Series (Procedure 1)	C1F021.dll	C1F021_A.dll
	H-2S2C	C1F022.dll	C1F022_A.dll
	AD Series Servo Drives	CHA04LS.dll	CHA04LS_A.dll
Hitech	Computer as Slave (COM)	C02001.dll	C02001_A.dll
	Computer as Master (COM)	C02011.dll	C02011_A.dll
	Computer as Slave V2 (COM)	N/A	N/A
	Computer as Master V2 (COM)	C02031.dll	C02031_A.dll
HOLIP ELECTRONIC TECHNOLOGY CO., LTD	HLP-C+/CP	CHLP01.dll	CHLP01_A.dll
Honeywell	BACnet/MSTP	N/A	N/A
	BACnet	cbacnet.dll	N/A
	Modbus Device/Slave (RTU, 255)	CHON01.dll	CHON01_A.dll
	Modbus Device/Slave (RTU, 255, NoBlock)	CHON01.dll	CHON01_A.dll
Hunjoen Electronic Co., Ltd.	H_Tech PID CONTROLLER	Chtech1.dll	Chtech1_A.dll
HUST Automation Inc.	CNC Controller	CHCNC01.dll	CHCNC01_A.dll

Brand	Model	PC/Simulation	WinCE(ARM)
Idec Corporation	FC Series	C22001.dll	C22001_A.dll
IECCO	Sinus Penta Inverter (RTU)	Ciecco.dll	Ciecco_A.dll
Inovance Control Technology Co., Ltd.	H2u (CPU Port)	C2B041.dll	C2B041_A.dll
	MD Series Inverter (RTU)	C2C051.dll	C2C051_A.dll
	MD Series Inverter (RTU-1)	C2C051.dll	C2C051_A.dll
	iS Servo (RTU)	C2C051.dll	C2C051_A.dll
Integrated Flow Systems	iPurge Source Controller	CIF001.dll	CIF001_A.dll
Invt Auto-Control Technology	IVC Series	C81003.dll	C81003_A.dll
JETTER	NANO Series	C24001.dll	C24001_A.dll
	JetControl 24x Series	C24011.dll	C24011_A.dll
Joint Peer Systec Corp.	IRIS Series	C2C031.dll	C2C031_A.dll
	JUPITER Series	C2C031.dll	C2C031_A.dll
	PDAN Series	C2C031.dll	C2C031_A.dll
	POS Series	C2C031.dll	C2C031_A.dll
Keyence Corp.	KV Series	C25001.dll	C25001_A.dll
	KV-1000	C25011.dll	C25011_A.dll
	KV-L20V	C25021.dll	C25021_A.dll
	KV-3000	C25031.dll	C25031_A.dll
Kinco Automation Ltd.	Kinco ED Series	CKIN01.dll	CKIN01_A.dll
Klockner Moeller Corporation	PS4-201-MM1	C26001.dll	C26001_A.dll
	SUCONET K	N/A	N/A
Koyo Electric Corp.	K Sequence Series	C27001.dll	C27001_A.dll
	Direct Logic Series	C27011.dll	C27011_A.dll
	Direct 06 Series (K Sequence)	C27021.dll	C27021_A.dll
	Direct 06 Series (DirectNET)	C27031.dll	C27031_A.dll
Lenze Drive Systems GmbH	93xx Servo Controllers (LECOM A/B)	CLZ001.dll	CLZ001_A.dll
LG Industrial Systems	Master-K Series CNet	C28001.dll	C28001_A.dll
	K120S CPU Port	C28011.dll	C28011_A.dll
	Master-K Loader	C28011.dll	C28011_A.dll
	GLOFA GM Series CNet	C28021.dll	C28021_A.dll
	XBM-DR16S	C28031.dll	C28031_A.dll
	GLOFA GM Loader	C28041.dll	C28041_A.dll
	XEC/XGI CNet	C28051.dll	C28051_A.dll
	XGT/XGK (CPU)	C28061.dll	C28061_A.dll
	XGL-C22A	C28071.dll	C28071_A.dll
LG System	LGA Series(as Slave)	CLGLGA.dll	CLGLGA_A.dll
	LGA Series (as Master)	CLGLGB.dll	CLGLGB_A.dll
Liyan Electric Industrial Ltd.	EX Series (CPU Port)	C2B141.dll	C2B141_A.dll
Lust Antriebstechnik GmbH	LustBus ServoC/CDE Series	Clust1.dll	N/A
	LustBus CDD Series	Clust1.dll	N/A
Matsushita Electric Works	FP Series Computer Link	C29001.dll	C29001_A.dll
	VF0C Series Inverter	C29011.dll	C29011_A.dll
	VF100 Series Inverter	C29011.dll	C29011_A.dll
Maxtech	MC2 PID Controller	C85001.dll	C85001_A.dll
Maxthermo	MC 5738 (RTU)	C86001.dll	C86001_A.dll
Mean Well Enterprises Co., Ltd.	PRETA	CMSMTN.dll	CMSMTN_A.dll
Megmeet	MC Series (RTU)	C81002.dll	C81002_A.dll
Micro Trend Corporation	UTC Servo Controller	C91001.dll	C91001_A.dll
MIKOM ELECTRICAL TECHNOLOGY	MX Series PLC	CMIK01.dll	CMIK01_A.dll
Mirle Automation Corporation	nDX Controller	C2A001.dll	C2A001_A.dll
Mitsubishi Electric Corp.	Melsec-FX (CPU Port)	C2B001.dll	C2B001_A.dll
	Melsec-Q/QnA (Link Port)	C2B011.dll	C2B011_A.dll
	Melsec-Q00/01 (CPU Port)	C2B012.dll	C2B012_A.dll
	Melsec-Q02H (CPU Port)	C2B021.dll	C2B021_A.dll
	Melsec-Q02 (CPU Port)	C2B022.dll	C2B022_A.dll
	Melsec-Q02U (CPU Port)	C2B191.dll	C2B191_A.dll
	Melsec-Q00J (CPU Port)	C2B031.dll	C2B031_A.dll
	Melsec-FX2n (CPU Port)	C2B041.dll	C2B041_A.dll
	Melsec-FX3U (CPU Port)	C2B051.dll	C2B051_A.dll
	Melsec-FX3U (Link Port)	C2B052.dll	C2B052_A.dll
	Melsec-AnN/AnS (Link Port)	C2B061.dll	C2B061_A.dll
	Melsec-AnN/AnS Protocol 4	C2B062.dll	N/A
	FX2n-10GM/20GM	C2B071.dll	C2B071_A.dll
	Melsec-A1S/A2S (CPU Port)	C2B081.dll	C2B081_A.dll
	FR-E500 Series (485)	C2B091.dll	C2B091_A.dll
	Melsec-A3N/A1SH (CPU Port)	C2B0A1.dll	C2B0A1_A.dll
	Melsec-AnA/AnU (Link Port)	C2B151.dll	C2B151_A.dll
	Melsec-AnA/AnU Protocol 4	C2B152.dll	N/A
	Servo Amplifier MR-J2S-A	C2B161.dll	C2B161_A.dll
	Servo Amplifier MR-J3-A	C2B162.dll	C2B162_A.dll
	Servo Amplifier MR-J4-A	N/A	C2B163_A.dll
	Melsec-A2A/A2AS (CPU Port)	C2B171.dll	C2B171_A.dll
	Melsec-Q06H (CPU Port)	C2B181.dll	C2B181_A.dll
	Melsec-Q12H (CPU Port)	C2B182.dll	C2B182_A.dll
	Melsec-Q03U (CPU Port)	C2B183.dll	C2B183_A.dll
	Melsec-Q00U (CPU Port)	C2B191.dll	C2B191_A.dll
	GOT-F900 Emulator (1:1 Format 1 & 2)	C2B201.dll	N/A
	Melsec-Q01U (CPU Port)	C2B191.dll	C2B191_A.dll
Mitutoyo Corporation	EV Linear Gage Counter (ASCII)	CMITDEV.dll	CMITDEV_A.dll
Modicon Corp.	Modicon 984 Master (RTU)	C2C021.dll	C2C021_A.dll
	Modicon 984 Master (RTU; Little Memory)	C2C022.dll	C2C022_A.dll
	Modicon 984 Device/Slave (RTU)	C2C031.dll	C2C031_A.dll
	Modbus Master (ASCII)	C2C061.dll	C2C061_A.dll
	Modbus Master (ASCII; Little Memory)	C2C062.dll	C2C062_A.dll
	Modbus Device/Slave (ASCII)	C2C071.dll	C2C071_A.dll
	Modicon Device/Slave (RTU, Quantum)	C2C081.dll	C2C081_A.dll
	TSX Premium (Uni-Telway)	C2C0A1.dll	C2C0A1_A.dll
	TSX Quantum (Uni-Telway)	N/A	N/A
	Twido (Modbus RTU)	C2C0C1.dll	C2C0C1_A.dll
	Modbus Master (RTU; Non-volatile slave data)	C2C121.dll	C2C121_A.dll
	Modbus Master (ASCII; Non-volatile slave data)	C2C161.dll	C2C161_A.dll
MTC	MTC96 Controller (Modbus ASCII)	C93001.dll	C93001_A.dll
Muscle Corporation Inc.	Cool Muscle CM1-17L30	CCM117L.dll	CCM117L_A.dll
MyTech	VL-CK: Melsec-FX2n (CPU Port)	CN2B41.dll	CN2B41_A.dll

Newtop Co., Ltd.	PSTC (Temperature Controller)	C2C051.dll	C2C051_A.dll
	PSBD (Bushless Driver)	C2C051.dll	C2C051_A.dll
	PSSD (Stepping Driver)	C2C051.dll	C2C051_A.dll
	PSMC (Motion Controller)	C2C051.dll	C2C051_A.dll
	PSNC (Embedded NC)	C2C051.dll	C2C051_A.dll
Omron Corporation	Sysmac C Series Host Link	C2D001.dll	C2D001_A.dll
	Sysmac CV Series Host Link	C2D011.dll	C2D011_A.dll
	Sysmac CS/CJ Series Host Link	C2D021.dll	C2D021_A.dll
	Sysmac CS/CJ Series (FINS)	C2D022.dll	C2D022_A.dll
	Sysmac CP Series (FINS)	C2D021.dll	C2D021_A.dll
	E5CN Temperature (CompoWay/F)	C2D041.dll	C2D041_A.dll
	E5CN Temperature (Modbus RTU)	C2D051.dll	C2D051_A.dll
	EJ1 Temperature (CompoWay/F)	C2D061.dll	C2D061_A.dll
	KM100 (CompoWay/F)	C2D071.dll	C2D071_A.dll
	3G3MV Inverter (RTU)	C2D081.dll	C2D081_A.dll
Pan-Globe Corp.	E9 Temperature Series	C90001.dll	C90001_A.dll
	E904 Temperature (RTU)	C90011.dll	C90011_A.dll
	HT Series Temperature Controller	C90021.dll	C90021_A.dll
Panasonic Corporation	FP Series	C29001.dll	C29001_A.dll
	MINAS A4 Series	CPANA4.dll	CPANA4_A.dll
PanelMaster	Null PLC	C00000.dll	C00000_A.dll
	N-to-1 Master (COM)	C01001.dll	C01001_A.dll
	Multi-drop Client (COM)	C01011.dll	C01011_A.dll
	General Device (COM)	C01051.dll	C01051_A.dll
	2-to-1 Server (COM)	C01061.dll	C01061_A.dll
	2-to-1 Transparent Server (COM)	N/A	N/A
	2-to-1 Transparent Server for Modbus Device/Slave (RTU)	C01063.dll	C01063_A.dll
	2-to-1 Transparent Server for Omron Sysmac C Series Host Link	C01064.dll	C01064_A.dll
	2-to-1 Client (COM)	C01071.dll	C01071_A.dll
	Serial Gateway Server	C010C1.dll	C010C1_A.dll
	Data Sharer (RS485)	N/A	C01S01_A.dll
	Modbus Master (RTU)	C2C041.dll	C2C041_A.dll
	Modbus Master (RTU; Little Memory)	C2C042.dll	C2C042_A.dll
	Modbus Master (RTU; Non-volatile slave data)	C2C043.dll	C2C043_A.dll
	Modbus Device/Slave (RTU)	C2C051.dll	C2C051_A.dll
	Modbus Device/Slave (RTU, 16Words)	C2C051.dll	C2C051_A.dll
	Modbus Device/Slave (Word order in big-endian)	C2C052.dll	C2C052_A.dll
	Modbus Device/Slave (RTU; No block read)	C2C051.dll	C2C051_A.dll
	Modbus Device/Slave (RTU, 30Words)	C2C051.dll	C2C051_A.dll
	Modbus Device/Slave (ASCII)	C2C093.dll	C2C093_A.dll
	Modbus Device/Slave (ASCII: No block read)	C2C093.dll	C2C093_A.dll
	Barcode Scanner	cbcode.dll	cbcode_A.dll
	Epson Matrix Printer	CEPSON0.dll	CEPSON0_A.dll
	PC Series PLC Module	C1A001.dll	C1A001_A.dll
Parker Hannifin	Compax3	C32001.dll	C32001_A.dll
Parker Hannifin S.p.A.	HID Series (X4 RS232 Port)	Cpark1.dll	Cpark1_A.dll
	SLVDN Series (X1 RS422/485 Port)	Cpark2.dll	Cpark2_A.dll
PORIS	XC Modbus RTU	C2C031.dll	C2C031_A.dll
RICH Electric Co., LTD.	EI-500 Series (RTU)	CEI500.dll	N/A
	EI-9001 Series (RTU)	CEI9001.dll	N/A
RKC Instrument Inc.	M4/00/CB900 Series (RTU)	C82001.dll	C82001_A.dll
	CD/CH Series (ASCII)	C82002.dll	C82002_A.dll
Saia Burgess	PCD Series (S-Bus PGU)	C31001.dll	C31001_A.dll
	PCD Series (S-Bus, Data Mode)	C31003.dll	C31003_A.dll
Samwon Technology	NOVA Series (RTU)	C88001.dll	C88001_A.dll
	NOVA Series	C88002.dll	C88002_A.dll
Schneider Electric	ATV31 Inverter (RTU)	C2C051.dll	C2C051_A.dll
	Lexium 23 Servo Controller (ASCII)	C16041.dll	C16041_A.dll
Sharp Corporation	JW10/20 Series	CSJW10.dll	CSJW10_A.dll
Shenzhen Sine Electric Co., Ltd	EM303A	CSIN01.dll	CSIN01_A.dll
Shenzhen Step Servo Ltd.	Kinco Servo Controller	C50001.dll	C50001_A.dll
Shenzhen V&T Technologies Co.,Ltd	V5-H	CVTT01.dll	CVTT01_A.dll
Shenzhen Xilin Electric Tech. Co., Ltd.	Inverter EH series (RTU)	CSXE01.dll	CSXE01_A.dll
Shihlin Electric&Engineering Corp.	SH Inverter	CSSH01.dll	CSSH01_A.dll
SHIMAX CO., LTD.	MAC3 Series (RTU)	CSHI01.dll	CSHI01_A.dll
Shinko Technos Co., Ltd.	CPT-20A MODBUS DEVICE/SLAVE (ASCII)	CSCCT1.dll	CSCCT1_A.dll
	JCS-33A-R/M (Shinko Protocol)	CSJCS01.dll	CSJCS01_A.dll
	JCS-33A-R/M (Modbus ASCII)	CSJCS11.dll	CSJCS11_A.dll
Siemens AG	Simatic S7-200 (PPI; 1-to-1)	C39001.dll	C39001_A.dll
	Simatic S7-200 (PPI; Network)	N/A	N/A
	Simatic S7-300 (MPI Port)	N/A	N/A
	Simatic S7-300 (PC Adaptor)	C39031.dll	C39031_A.dll
	Simatic S5 3964R	C39041.dll	C39041_A.dll
	Simatic S5	C39051.dll	C39051_A.dll
Taian Automation Co.,Ltd.	TP03 Series (Modbus RTU)	C51011.dll	C51011_A.dll
	TP02 Series	C51021.dll	C51021_A.dll
Taiwan Instrument & Control Co., Ltd.	TAIE FY100/900 Series (RTU)	CFY001.dll	N/A
	TAIE FY100/900 Series (TAIE)	CFY002.dll	N/A
	FY series DIGITAL PID CONTROLLER	CTAIEFY.dll	N/A
Teco Electric & Machinery Co.,Ltd.	TSDA Series AC Servo	C51001.dll	C51001_A.dll
	TP03 Series (Modbus RTU)	C51011.dll	C51011_A.dll
	TP02 Series	C51021.dll	C51021_A.dll
	TSTA Series AC Servo	C51031.dll	C51031_A.dll
TESHOW ELECTRONIC.	MY90V/MY40V Series (RTU)	CMY901.dll	CMY901_A.dll
Texas Instruments Incorporated	TI505	CTI505.dll	CTI505_A.dll
Thinget Electronic Co., Ltd.	XC Series Controller (RTU)	C89001.dll	C89001_A.dll
Tieon Electronics Co., Ltd.	IPC-03 Series (RTU)	C83001.dll	C83001_A.dll
TOHO Electronics Inc.	TTX-700 (Modbus RTU)	C3D001.dll	C3D001_A.dll
	TTM-000 Series (TOHO Protocol)	C3D002.dll	C3D002_A.dll
	TTM-200 Series (TOHO Protocol)	C3D003.dll	N/A
TOKY ELECRTICAL	DW8-CD18B	CTDW80.dll	CTDW80_A.dll
Tokyo Keiso	UCM-04A	CTK001.dll	CTK001_A.dll
Toshiba Schneider Inverter Corporation	TOSVERT VF Series(Modbus RTU)	C84001.dll	C84001_A.dll
Unitronics	Vision 120 Series (Modbus RTU)	C4A001.dll	C4A001_A.dll
Vertex Technology Co,. Ltd	VT26/30 Series Controllers (RTU)	CVT26.dll	CVT26_A.dll
Vigor Corporation	MVB Series	C42001.dll	C42001_A.dll

Brand	Model	PC/Simulation	WinCE(ARM)
VIPA GmbH	VIPA 100V/200V MPI Port	N/A	N/A
Vware	Null PLC	C00000.dll	C00000_A.dll
	N-to-1 Master (COM)	C01001.dll	C01001_A.dll
	Multi-dropp Client (COM)	C01011.dll	C01011_A.dll
	General Device (COM)	C01051.dll	C01051_A.dll
	Data Sharer (RS485)	N/A	C01S01_A.dll
Wanfeng Electric	WF Series	C42001.dll	C42001_A.dll
YABOS	Hospital System	CYHS01.dll	CYHS01_A.dll
	Dentists	CYHS02.dll	CYHS02_A.dll
YAMAHA MOTOR CO., LTD.	Single-axis Robot Controller ERCD	CYAERCD.dll	CYAERCD_A.dll
Yamatake Corporation	SDC35/36 Temperature (RTU)	C44001.dll	C44001_A.dll
	SDC35/36 Temperature (ASCII)	C44011.dll	C44011_A.dll
	MA500 FA Controller (ECL Host)	C44021.dll	C44021_A.dll
	DMC10 Controller (RTU)	C44031.dll	C44031_A.dll
	DMC10 Controller (ASCII)	C44041.dll	C44041_A.dll
	MX30	CYaMX30.dll	CYaMX30_A.dll
	MX50	CYaMX50.dll	CYaMX50_A.dll
Yaskawa Corporation	Σ-II SGDM/H Series AC Servo	C45001.dll	C45001_A.dll
	MP Series Controller (Memobus)	C45011.dll	C45011_A.dll
	V7 inverter (Memobus)	C45021.dll	C45021_A.dll
	NS600 Servo Controller	C45031.dll	C45031_A.dll
YE-LI ELECTRIC & MACHINERY Co., Ltd.	YPV Servo Controller	cyeli1.dll	cyeli1_A.dll
	YJD Servo Controller	cyeli2.dll	cyeli2_A.dll
Yokogawa Electric Corporation	FA-M3 Series (CPU Port)	C46001.dll	C46001_A.dll
Yudian Automation Technology Ltd.	AI-7048 (AIBus)	C47001.dll	C47001_A.dll
	AI518/708/808/518P/708P/808P Controller (Aibus)	C47011.dll	C47011_A.dll
Zhuhai Motion Control Motor Co., Ltd.	BP Series PSDA driver (RTU)	C2CBP1.dll	N/A

Direct Link (Ethernet)

Advantech	BACnet/IP	N/A	N/A
	BAS BACnet/IP	N/A	N/A
	ADAM-6000 (ModBus TCP/IP)	CM6M00.dll	CM6M00_A.dll
Allen Bradley	MicroLogix 1000/1500 via 1761-NET-ENI	C10E01.dll	C10E01_A.dll
	MicroLogix	C10E02.dll	C10E02_A.dll
	CompactLogix/ControlLogix Ethernet/IP Tag	C10E21.dll	C10E21_A.dll
Astraada HMI	ModBus Master (TCP/IP)	C2C001.dll	C2C001_A.dll
	ModBus Device/Slave (TCP/IP)	C2C011.dll	C2C011_A.dll
	ModBus Master (TCP/IP; Type 2)	C2C101.dll	C2C101_A.dll
	ModBus Device/Slave (TCP/IP; Type 2)	C2C111.dll	C2C111_A.dll
Bosch Rexroth	ModBus Device/Slave (TCP/IP; Type 2)	C2C111.dll	C2C111_A.dll
CMZ Sistemi Elettronici	FCT Controllers(TCP/IP; Type 2)	Cmz111.dll	Cmz111_A.dll
DEIF A/S	TCP/IP Modbus (Ethernet port)	C2C112.dll	C2C112_A.dll
EasyIO	EasyIO-30 (RTU)	C2C211.dll	C2C211_A.dll
Fatek Automation Corp.	Fatek FBs/FBe (TCP)	C1A011.dll	C1A011_A.dll
Festo Corporation	FPC/FEC EasyIP	C1C002.dll	C1C002_A.dll
GE Corporation	SRTP Ethernet	C1E101.dll	C1E101_A.dll
	SRTP Ethernet (Micro)	C1E102.dll	C1E102_A.dll
Hitachi Industrial Equipment Systems Co., Ltd	EH/EHV Series (Ethernet; TCP)	C1F006.dll	N/A
	EH/EHV Series (Ethernet; UDP)	C1F007.dll	N/A
Honeywell	BACnet/IP	N/A	N/A
JETTER	JetControl 24x Series (Ethernet)	C24012.dll	N/A
Keyence Corp.	KV-5000	C25041.dll	C25041_A.dll
Lenze Drive Systems GmbH	E94AYCEN GCI(TCP/IP) Protocol	CLZ003.dll	CLZ003_A.dll
LG Industrial Systems	XGT/XGK (CPU)	C28081.dll	C28081_A.dll
Mirle Automation Corporation	Fama SoftPLC Ethernet	C19E01.dll	C19E01_A.dll
	ModBus Device/Slave (TCP/IP)	C2C011.dll	C2C011_A.dll
Mitsubishi Electric Corp.	Q Ethernet	C2BE11.dll	C2BE11_A.dll
	Q Ethernet (ASCII code)	C2BE12.dll	C2BE12_A.dll
	Melsec-FX3U (MC-Protocol)	C2BE52.dll	C2BE52_A.dll
Modicon Corp.	ModBus Master (TCP/IP)	C2C001.dll	C2C001_A.dll
	ModBus Device/Slave (TCP/IP)	C2C011.dll	C2C011_A.dll
	ModBus Master (TCP/IP; Type 2)	C2C101.dll	C2C101_A.dll
	ModBus Device/Slave (TCP/IP; Type 2)	C2C111.dll	C2C111_A.dll
Omron Corporation	Sysmac CS/CJ Series FINS/TCP	C2DE01.dll	C2DE01_A.dll
Panasonic Corporation	FP Series Computer Link	CPAN20.dll	CPAN20_A.dll
PanelMaster	N-to-1 Master (Ethernet)	C01021.dll	C01021_A.dll
	N-to-1 Slave (Ethernet)	C01031.dll	C01031_A.dll
	TCP/IP Gateway Server	C010B1.dll	C010B1_A.dll
	Data Sharer (UDP)	C01E01.dll	C01E01_A.dll
	Ping	N/A	N/A
	Modbus Device/Slave (TCP/IP)	C2C211.dll	C2C211_A.dll
	Internal Memory Server	C2C301.dll	C2C301_A.dll
	Internal Memory	C2C311.dll	C2C311_A.dll
PORIS	XC ModBus TCP	C2C011.dll	C2C011_A.dll
Saia Burgess	PCD Series (Ether-S-Bus)	C31007.dll	C31007_A.dll
Siemens AG	Simatic S7-300 Ethernet Module (CP343)	C39E01.dll	C39E01_A.dll
	SIMATIC S7 (Ethernet)	C39E02.dll	C39E02_A.dll
	SIMATIC S7-200 SMART (Ethernet)	C39E11.dll	C39E11_A.dll
TPM	EPC-1000	CTEPC0.dll	CTEPC0_A.dll
Vware	N-to-1 Master (Ethernet)	C01021.dll	C01021_A.dll
	N-to-1 Slave (Ethernet)	C01031.dll	C01031_A.dll
WAGO Kontakttechnik GmbH & Co. KG	WAGO-I/O-SYSTEM 750	CWAG01.dll	CWAG01_A.dll
Yaskawa Corporation	ModBus Device/Slave (TCP/IP)	C45012.dll	C45012_A.dll
	Extended MEMOBUS	C45013.dll	C45013_A.dll
Yokogawa Electric Corporation	FA-M3 Series (UDP)	C46002.dll	C46002_A.dll
	FA-M3 Series (TCP)	C46003.dll	C46003_A.dll

Note:

- The listing brand names are in alphabetical order.
- Driver Programs may be updated at any time, please contact with your Advantech representative at any time to confirm latest information.

Key Features:

- High-performance discrete drive to support high data acquisition.
- The Communication speed of Simatic S7-300 (MPI port) can reach 187.5 kbps without adapter.

Regional Service & Customization Centers

China	Taiwan	Netherlands	Poland	USA/ Canada
Kunshan	Taipei	Eindhoven	Warsaw	Milpitas, CA
86-512-5777-5666	886-2-2792-7818	31-40-267-7000	48-22-33-23-740 / 41	1-408-519-3898

Worldwide Offices

Greater China

China

Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

Taiwan

Toll Free	0800-777-111
Neihu	886-2-2792-7818
Xindian	886-2-2218-4567
Taichung	886-4-2378-6250
Kaohsiung	886-7-229-3600

Asia Pacific

Japan

Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887

Korea

Toll Free	080-363-9494
Seoul	82-2-3663-9494

Singapore

Singapore	65-6442-1000

Malaysia

Toll Free	1800-88-1809
Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188

Indonesia

Jakarta	62-21-769-0525

Thailand

Bangkok	66-2-248-3140

India

Toll Free	1-800-425-5070
Bangalore	91-80-2545-0206

Australia

Toll Free	1300-308-531
Melbourne	61-3-9797-0100
Sydney	61-2-9476-9300

Europe

Toll Free	00800-2426-8080

Germany

Munich	49-89-12599-0
Hilden / D´dorf	49-2103-97-885-0

France

Paris	33-1-4119-4666

Italy

Milano	39-02-9544-961

Benelux & Nordics

Breda	31-76-5233-100

UK

Reading	44-0118-929-4540

Poland

Warsaw	48-22-33-23-740 / 41

Russia

Toll Free	8-800-550-01-50
Moscow	7-495-232-1692

Americas

North America

Toll Free	1-888-576-9668
Cincinnati	1-513-742-8895
Milpitas	1-408-519-3898
Irvine	1-949-420-2500

Brazil

Toll Free	0800-770-5355
Saude-São Paulo	55-11-5592-5355

Mexico

Toll Free	1-800-467-2415
Mexico City	52-55-6275-2777

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com/eA

8600000065