

Intelligent Operator Panels

Enabling Flexible Connectivity through Powerful
Solution-oriented Software

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ADVANTECH

Enabling an Intelligent Planet

www.advantech.com/eA

WebOP 2000 Series

To satisfy the stringent standards required in the automation market, Advantech offers the WebOP-2000 series for different applications involving the use of PLCs, motion/thermal controllers, inverters and sensors. WebOP Designer 2.0 is a software development kit which helps create application solutions for labor-saving, improved efficiency of manufacturing and easy control of every machine in the factory. WebOP-2000 series is bundled with WebOP Designer 2.0 offering an outstanding price performance ratio for various markets such as conventional operator panels, HMI + Low mini SCADA systems, and HMI + communication gateways.



Industrial Applications

- Focuses on textile, packaging and pharmaceutical applications
- Wide market coverage in Building Automation, with BACNet MSTP/TP support

Hardware & Communication

- Compact, flat-sealed with NEMA4/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 Series Selection Guide



Model Name		WebOP-2040T		WebOP-2050T	WebOP-2070T		WebOP-2080T		WebOP-2100T		
Ordering Information		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	
CPU		RISC 32bits, 200MHz									
Battery Backup Memory		128KB									
Working Memory		32 MB SDRAM			64 MB SDRAM						
Flash Memory		8MB NOR Flash									
		-	128M NAND flash	128M NAND flash	-	128M NAND flash	-	128M NAND flash	-	128M NAND flash	
Operating System		HMI RTOS, WebOP Designer 2.0									
Display	Type	WQVGA(16:9) TFT LCD		Similar QVGA TFT LCD		WVGA(16:9) TFT LCD		SVGA TFT LCD		Similar WSVGA TFT LCD	
	Size	4.3"		5.6"		7"		8"		10.1"	
	Max. Resolution	480 x 272		320 x 234		800 x 480		800 x 600		1024 x 600	
	Max. Colors	65,536 colors									
	Luminance (cd/m2)	400		330		300		250		250	
	Viewing Angle (H/V°)	100/95		130/110		140/130		140/130		140/110	
	Backlight Life (hur)	LED, 20,000		LED, 20,000		LED, 20,000		LED, 30,000		LED, 20,000	
	Dimming	Adjustable									
Touchscreen		4 wires Analog resistive									
Power-On LED		Yes									
Communication LED		No									
Front USB Access		No									
Communication Interface	COM1	RS232/422/485(DB9 Female)									
	COM2	RS422/485 (5 Pin Plug Connector)									
	COM3	RS232 (Com1: Pin5;7;8)									
	Ethernet (RJ45)	-	10/100-BaseT	-	-	10/100-BaseT	-	10/100-BaseT	-	10/100-BaseT	
I/Os	USB Client	Yes									
	USB Host	Yes									
	Micro-SD Slot	-	Yes	Yes	-	Yes	-	Yes	-	Yes	
Power Supply Voltage		24V _{DC} ±10%									
Power Consumption		5W		10W	10W		10W		10W		
Dimension W x H x D (mm)		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")	
Cut-out Diemsnsion W x H (mm)		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")	
Front Panel thickness (mm)		5 mm		6 mm		6 mm		6 mm		6 mm	
Net Weight		0.3 kg		0.51kg		0.6kg		0.93 kg		1.2 kg	
Operating Temperature		0 ~ 50°C (32 ~ 122° F)									
Storage Temperature		-20 ~ 60°C (-4 ~ 140° F)									
Humidity		10% ~ 90% RH @ 40° C, non-condensing									
Ingress Protection		Front panel: NEMA4, IP66									
Certification Approval		CE / FCC / BSMI / CCC / UL									



WebOP-2035V		WebOP-2057V		WebOP-2070V	WebOP-2080V	WebOP-2104V	WebOP-2121V
WOP-2035V-S1AE	WOP-2035V-N1AE	WOP-2057V-S1AE	WOP-2057V-N1AE	WOP-2070V-N4AE	WOP-2080V-N4AE	WOP-2104V-N4AE	WOP-2121V-N4AE
RISC 32bits, 70MHz				RISC 32bits, 200MHz			
128KB							
1 MB SDRAM		1 MB SDRAM	2 MB SDRAM	64 MB SDRAM			
4MB				16MB			
-							
HMI RTOS, WebOP Designer 2.0							
QVGA TFT LCD	QVGA TFT LCD			WVGA TFT LCD	SVGA TFT LCD	SVGA TFT LCD	SVGA TFT LCD
3.5"	5.7"			7"	8"	10.4"	12.1"
320 x 240	320 x 240			800 x 480	800 x 600	800 x 600	800 x 600
256 colors				65,536 colors			
350	400			300	350	300	350
120/100	100/95			140/130	140/130	140/120	130/110
LED, 20,000	LED, 20,000			LED, 20,000	LED, 30,000	LED, 30,000	CCFL, 30,000
Adjustable							
4 wires Analog resistive							8 wires Analog resistive
Yes							
No	COM1 and COM2			No	COM1, COM2 and COM3		
No						Yes	No
RS-232/422/485 (DB9 Female)							
RS-422/485 (5-Pins Plug Connector)							
-				RS-232 (6-Pins Plug Connector)			
-	10/100-BaseT	-	10/100-BaseT	10/100-BaseT			
-							
-				Yes			
-							
24V _{DC} ±10%							
10W	15W			25W	25W	25W	25W
130 x 106.2 x 45mm (5.11" x 4.18" x 1.77")	187 x 145.7 x 45mm (7.36" x 5.73" x 1.77")			188 x 143.3 x 40mm (7.4" x 5.64" x 1.57")	232.5 x 175.8 x 42.9mm (9.15" x 6.92" x 1.69")	297 x 224 x 52mm (11.6" x 8.8" x 2.04")	315 x 241 x 54.5mm (12.4" x 9.48" x 2.14")
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")	285.5 x 210.5mm (11.24" x 8.28")	301.5 x 228mm (11.87" x 8.97")
6 mm	6 mm			6 mm	6 mm	6 mm	6 mm
0.27 kg	0.65 kg			1.0 kg	1.0 kg	1.55 kg	1.55 kg
0 ~ 50°C (32 ~ 122°F)							
-20 ~ 60°C (-4 ~ 140°F)							
10 ~ 95% RH @ 40°C, non-condensing							
Front panel: NEMA4, IP65							
CE / FCC / BSMI / CCC / UL							

WebOP-2000 Series Features

With ARM9-based RISC processors up to 200MHz and 128MB flash memory, the WebOP-2000 series supports a variety of LCD sizes from 3.5" to 12.1" 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-2000 series can easily connect to a variety of equipment. The monitors boast SVGA TFT LCDs with 64K colors and 1024 x 600 resolution for clear displays in any factory setting. Furthermore, these products include NEMA4/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-2000 series and WebOP Designer 2.0 provide an outstanding price/performance ratio for a variety of factory automation needs.



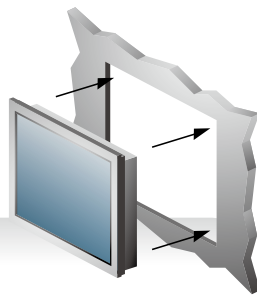
Complete Range of LCD Sizes From 3.5" to 12.1"

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



Front USB Access

Front USB port accessible in 10.4" HMI which provides excellent convenience for operators and technicians



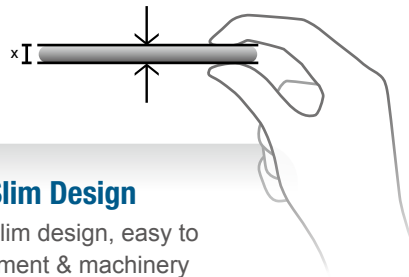
Panel Mounting

Easy to install into machines with special panel mounting design



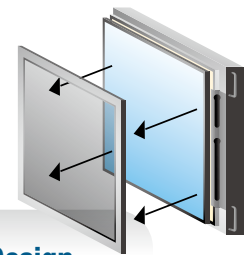
RTC Battery Backup

Backup sequence programs such as history, alarm, and receipt to keep systems safe in case of PLC failure



Compact & Slim Design

Compact and slim design, easy to mount in equipment & machinery



Customized Front Panel Design

Advantech can provide customized front panels with optional labels to service any customer's request



Horizontal & Vertical Screen Orientation

Portrait mode selection to allow two different display modes



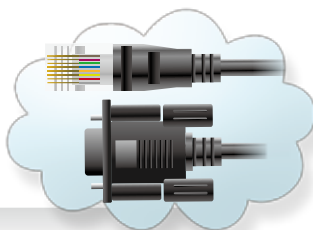
Waterproof / IP66 Protection

All models support NEMA 4/ IP66 protection and 0 ~ 50°C operating temperatures



Rich 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.



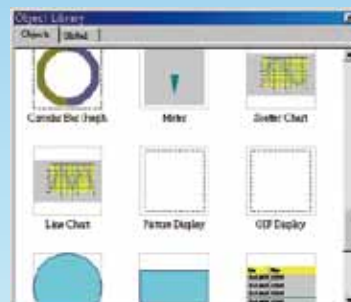
■ Software Features

- 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.

Simple

Easy

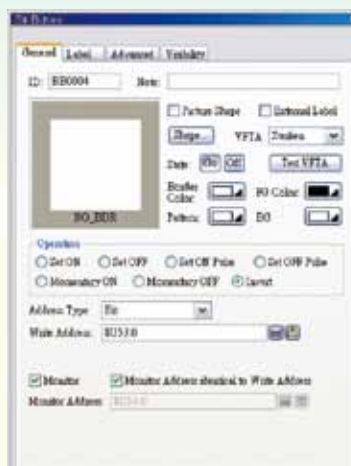
Innovative

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.



- 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.

- Support 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 import/export 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 followings 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.



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



WebOP Designer Software

Simple Text Mapping Table Fulfills The Needs for Multiple Languages

Text database and text editor

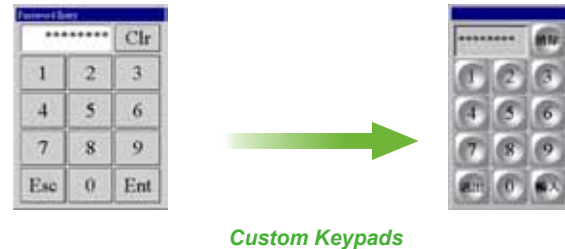
- Text database tables have multiple columns to contain strings for all supported languages with import/export functions, you can use Microsoft Excel to edit strings and import them for an application.



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 a special requirement.
- Using on-screen keypads instead of pop-up keypads is possible.



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

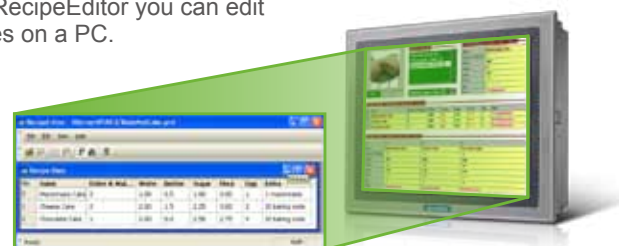
- With the support of dynamic range, a screen object can adapt its display to the current range settings to show information more readable and precise.



Provide Complete Recipe Handling Functions

Recipe blocks

- Support 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.



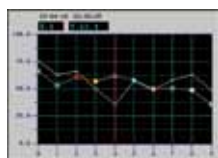
Easy to Configure Data Collections and Historic Data Displays

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.

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.

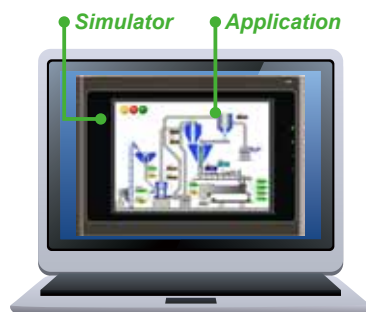
Date	Time	Message
31/08/09	16:56:53	Scrolled the slide switch. (637)
31/08/09	16:56:49	Inputted a new value (996.7)
31/08/09	16:56:33	Button is clicked. (OFF)
31/08/09	16:56:32	Scrolled the slide switch. (318)
31/08/09	16:56:29	Inputted a new value (5.0)
31/08/09	16:56:25	Button is clicked. (ON)
31/08/09	16:56:19	Cleared the operation history

Operation Log Display

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

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.



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.



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 a USB memory stick or MicroSD card.



Successful Applications



Batch Operation Control in Food and Beverage Market

APAX-5570 : PC-based Controller with Intel® Celeron M CPU

WebOP-2070T : 7" WVGA Operator Panel with WebOP Designer 2.0 Software

Automated mixing and blending systems are designed to provide accurate proportions of ingredients with quick recipe changes when necessary. The WebOP-2070T and Advantech's APAX Controllers can operate as batch controllers, providing strong computational power for temperature, pressure and sequential functions in the field. Not only can the APAX-5570 easily link with different devices, its wide operating temperature range and robust design allow it to control all day long while maintaining system stability. The WebOP-2070T supports flexible connectivity controls through powerful solution-oriented software which can easily execute functions such as recipe selection and storage.



Packaging & Label Slitting Machinery Process Control

WebOP-2050T : 5.6" QVGA Operator Panel with WebOP Designer 2.0 Software

Delivering a high degree of durability with a low total cost of ownership is a key factor for efficient packaging. Therefore, to provide accurate and on-time information, food and beverage targeted controllers need to be able to connect to standard Ethernet networks with high reliability to provide continuous transmissions. For the data transmission, we need an interface which can connect different devices to make the entire process easier for the end user. WebOP-2050T was highly recommended for this application bundled with WebOP Designer HMI Development software, to create application solutions for labor-saving, improved efficiency of manufacturing and easy control of every machine in the factory.



Car Wash Control System

WebOP-2080T : 8" SVGA Operator Panel with WebOP Designer 2.0 Software

ADAM-5550 : 8-slot Programmable Automation Controller

There are a few different steps in a car washing sequence, first is the pre-wash, second is a soap process, and finally the brushing to remove all the dirt off the vehicle. The horizontal brush needs to follow the contour of the vehicle. To control these steps and functions, we need a touch operator panel and controller. For this requirement, WebOP-2080T attached to an ADAM-5550 controller provides the perfect combination to optimize systems for long-term use. This architecture ensures high reliability for critical control tasks and satisfies users in need of high performance solutions for complex control applications.



Automatic Quality Inspection in Electronic Manufacturing

WebOP-2100T : 10.1" SVGA Operator Panel with WebOP Designer 2.0 Software
AMAX-2050KW: GX2-400 Machine Control Box with AMONet and CAN Interface
ADAM-5550KW: 8-slot Programmable Automation Controller

Inspection is a must in quality control to ensure the safety or reliability of structures or machinery. Also, quality inspection can be used by the customer with the objective of reducing risk and total cost of ownership. Inspection of raw material and components can assure and monitor the quantity being produced. The integrated solution consists of an operator panel attached to an ADAM-5550KW and AMAX-2050KW, to provide the data acquisition and analysis, and direct orders to devices. As the main interface for this solution, the WebOP-2100T with flat-panel display was installed near the inspection station and the results can be viewed on the touchscreen monitor.



Temperature Control Test Chamber

WebOP-2121V : 12.1" SVGA Operator Panel with WebOP Designer 2.0 Software

During the process of quality control, temperature and humidity are the necessary tests. Therefore the required chambers need to ensure precise, reliable service in an array of various applications. To meet the requirements, WebOP-2121V is the perfect choice for operating and checking data through graphic expression, all settings can be done in WebOP-2121V with flow and pressure settings.



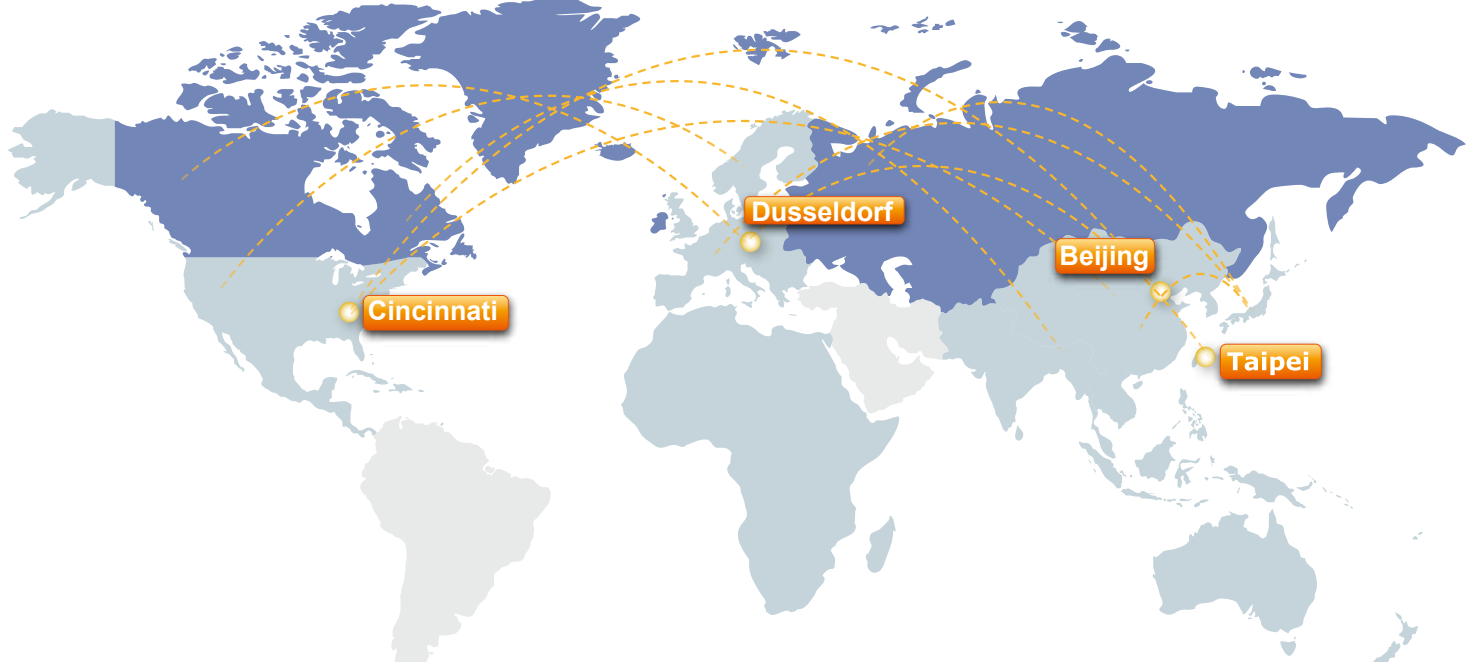
HVAC Control System in Building Automation

WebOP-2040T : 4.3" QVGA Operator Panel with WebOP Designer 2.0 Software

More and more HVAC systems can interface to building automation systems which makes the building owners have more control over the heating or cooling units. The building owner can monitor the system and respond to alarms generated by the system from local or remote locations. The system can be scheduled for occupancy or the configuration can be changed from the Building Automation Solution, depending on the different interfaces can be used. As the main interface of this solution, WebOP-2040T is highly recommended. Not only can it easily link with the control system server, its WebOP Designer software supports data from many devices with various methods.

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

Communication Port (COM)

Brand	Model	Driver
A&D Company Ltd.	AD-4401 Weighing Indicator	CAD401
ABIDO Automation Co., Ltd.	ACR420 984 Device/Slave (RTU)	C2C032
ADLEE POWERTRONIC CO., LTD.	MS/AP/AS Series Inverter (RTU)	CAPINV
	BL/D305 Series (RTU)	CAPIPM
	Null PLC	C00000
	ADAM (Modbus RTU)	C2C031
	ADAM-4012 (ASCII)	CM4012
	ADAM-4017 (ASCII)	CM4017
	ADAM-4018+ (ASCII)	CM4018P
	ADAM-4021 (ASCII)	CM4021
	ADAM-4050 (ASCII)	CM4050
	ADAM-4052 (ASCII)	CM4052
	ADAM-4053 (ASCII)	CM4053
	ADAM-4056 (ASCII)	CM4056
	ADAM-4060 (ASCII)	CM4060
AIGO Technologies Corporation	SE500 Series (Modbus RTU)	C87001
	Micrologix 1000/1500	C10001
	SLC 5/03, 5/04	C10002
	DH-485 (COM)	C10003
	PLC-5	C10005
	SLC 5/03, 5/04 (CRC)	C10006
ARICO Technology	FC Type(Modbus)	Carfc01
	Modbus Master (RTU)	C2C021
	Modbus Device/Slave (RTU)	C2C031
Astraada HMI	Modicon Device/Slave (RTU, Quantum)	C2C081
	Modbus Master (RTU; Non-volatile slave data)	C2C121
Automation Technology Co., Ltd.	BLDC NLV/KLV Series	CAK200
Banner Engineering Int'l Inc.	BSP01 Series	C51011
CAPAC	TC	CCAP01
CHINO Corporation	DB1000 Digital Indicating Controller (ASCII)	CCDB1k
	NFO Controllers	CCMZ051
	FCT Controllers	CCMZ151
	SD Drivers	CCMZ251
	SDS Drivers	CCMZ351
	MDM Drivers	CCMZ451
CTB Technologies Corporation	IMS Servo Controller	CAA001
Danfoss Group	VLT 2800 Series (FC Protocol)	CDAVLT
DEIF A/S	Modbus RTU (COM port)	C2C082
	DVP-ES/SS/EP/EH	C16001
	DVP-ES/SS/EP/EH (No block read)	C16001
	VFD-M Inverter (ASCII)	C16011
	VFD-B Inverter (ASCII)	C16021
	DTC1000/2000 Temperature (ASCII)	C16031
	ASDA-A Servo Controller (ASCII)	C16041
	ASDA-B Servo Controller (ASCII)	C16051
	ASDA-A2 Servo Controller (ASCII)	C16061
Dirise Electric Technology Co.,Ltd.	DRS2000 Series Inverter	C15101
	DRS2800 M Series Inverter	CFDSR01
Emerson Network Power	EC Series (RTU)	C81001
	EV1000 Series Variable Speed Driver	C81011
Epson Corporate	Epson LQ Matrix Printer	CEPSON0
	Eura EF1S/1N	C2B001
	Eura EF2N	C2B041
	Eura Inverter (Modbus RTU)	C2C051
	Eura Inverter (Modbus ASCII)	C2C093
Fatek Automation Corp.	FATEK FBs/FBe	C1A001
Festo Corporation	FPC/FEC Series	C1C001
	NB Series	C1D001
	PXR Series Temperature (RTU)	C1D011
	FRENIC-VP (RTU)	C1D021
	FRENIC5000G11/P11 (Fuji)	C1D031
	FRENIC-Mini/Eco/Multi/Mega(RTU)	C1D051
FKV Automation Co., Ltd.	F Series Inverter	CFDSR01
GE Corporation	90 Series SNP	C1E001
	90 Series CCM	C1E011
Gigarise Technology Co., Ltd.	SE5000	C87002
	GA400 Temperature (RTU)	C90012
GOFAST Corporation	NC Series	C42001
Haivell Technology Co., Ltd	HW Series (RTU)	CHW001
Hanbell Precise Machinery Co., Ltd.	Air Screw Compressor	CHANASC
	SJ200 Inverter	C1F001
	H/EH Series	C1F020
	EHV Series (Procedure 1)	C1F021
	H-252C	C1F022
	AD Series Servo Drives	CHA04LS
	Computer as Slave (COM)	C02001
	Computer as Master (COM)	C02011
	Computer as Slave V2 (COM)	C02021
	Computer as Master V2 (COM)	C02031
HOLIP ELECTRONIC TECHNOLOGY CO., LTD	HLP-C+/CP	CHLP01
Honeywell	BACnet/MSTP	cbacmst
	BACnet	cbacnet

Brand	Model	Driver
Hunjoen Electronic Co., Ltd.	H_Tech PID CONTROLLER	Chtech1
HUST Automation Inc.	CNC Controller	CHCNC01
Idec Corporation	FC Series	C22001
IECCO	Sinus Penta Inverter (RTU)	Ciecco
	H2u (CPU Port)	C2B041
	MD Series Inverter (RTU)	C2C051
	MD Series Inverter (RTU-1)	C2C051
	IS Servo (RTU)	C2C051
Integrated Flow Systems	iPurge Source Controller	CIF001
JETTER	NANO Series	C24001
JETTER	JetControl 24x Series	C24011
	KV Series	C25001
Keyence Corp.	KV-1000	C25011
	KV-L20V	C25021
	PS4-201-MM1	C26001
Klockner Moeller Corporation	SUCONET K	CSUK01
	K Sequence Series	C27001
	Direct Logic Series	C27011
	Direct 06 Series (K Sequence)	C27021
	Direct 06 Series (DirectNET)	C27031
Lenze Drive Systems GmbH	93xx Servo Controllers (LECOM A/B)	CLZ001
	Master-K Series CNet	C28001
	K120S CPU Port	C28011
	Master-K Loader	C28011
	GLOFA GM Series CNet	C28021
	XBM-DR16S	C28031
	GLOFA GM Loader	C28041
	XEC/XGI CNet	C28051
LG System	LGA Series(as Slave)	CLGLGA
	LGA Series (as Master)	CLGLGB
Liyan Electric Industrial Ltd.	EX Series (CPU Port)	C2B141
Lust Antriebstechnik GmbH	LustBus Servo/C/CDE Series	Clust1
	LustBus CDD Series	Clust1
	FP Series Computer Link	C29001
Matsushita Electric Works	VF0C Series Inverter	C29011
	VF100 Series Inverter	C29011
Maxtech	MC2 PID Controller	C85001
Maxthermo	MC 5738 (RTU)	C86001
Mean Well Enterprises Co., Ltd.	PRETA	CMSMTN
Megmeet	MC Series (RTU)	C81002
Micro Trend Corporation	UTC Servo Controller	C91001
Mirle Automation Corporation	nDX Controller	C2A001
	Melsec-FX (CPU Port)	C2B001
	Melsec-Q/QnA (Link Port)	C2B011
	Melsec-Q00/01 (CPU Port)	C2B012
	Melsec-Q02H (CPU Port)	C2B021
	Melsec-Q00J (CPU Port)	C2B031
	Melsec-FX2n (CPU Port)	C2B041
	Melsec-FX3U (CPU Port)	C2B051
	Melsec-FX3U (Link Port)	C2B052
	Melsec-AnN/AnS (Link Port)	C2B061
	FX2n-10GM/20GM	C2B071
	Melsec-A1S/A2S (CPU Port)	C2B081
	FR-E500 Series (485)	C2B091
	Melsec-A3N/A1SH (CPU Port)	C2B0A1
	Melsec-AnA/AnU (Link Port)	C2B151
	Servo Amplifier MR-J2S-A	C2B161
	Melsec-A2A/A2AS (CPU Port)	C2B171
	Melsec-Q06H (CPU Port)	C2B181
	Melsec-Q12H (CPU Port)	C2B182
	Melsec-Q00U (CPU Port)	C2B191
	GOT-F900 Emulator (1:1 Format 1 & 2)	C2B201
	Melsec-Q01U (CPU Port)	C2B191
Mitutoyo Corporation	EV Linear Gage Counter (ASCII)	CMITDEV
	Modicon 984 Master (RTU)	C2C021
	Modicon 984 Master (RTU; Little Memory)	C2C022
	Modicon 984 Device/Slave (RTU)	C2C031
	Modbus Master (ASCII)	C2C061
	Modbus Master (ASCII; Little Memory)	C2C062
	Modbus Device/Slave (ASCII)	C2C071
	Modicon Device/Slave (RTU, Quantum)	C2C081
	TSX Premium (Uni-Telway)	C2C0A1
	TSX Quantum (Uni-Telway)	C2C0B1
	Twido (Modbus RTU)	C2C0C1
	Modbus Master (RTU; Non-volatile slave data)	C2C121
	Modbus Master (ASCII; Non-volatile slave data)	C2C161
MTC	MTC96 Controller (Modbus ASCII)	C93001
Muscle Corporation Inc.	Cool Muscle CM1-17L30	CCM117L
MyTech	VL-CX: Melsec-FX2n (CPU Port)	CN2B41

Brand	Model	Driver
Newtop Co., Ltd.	PSTC (Temperature Controller)	C2C051
	PSBD (Brushless Driver)	C2C051
	PSSD (Stepping Driver)	C2C051
	PSMC (Motion Controller)	C2C051
	PSNC (Embedded NC)	C2C051
Omron Corporation	Sysmac C Series Host Link	C2D001
	Sysmac CV Series Host Link	C2D011
	Sysmac CS/CJ Series Host Link	C2D021
	Sysmac CS/CJ Series (FINS)	C2D021
	Sysmac CP Series (FINS)	C2D021
	E5CN Temperature (CompoWay/F)	C2D041
	E5CN Temperature (Modbus RTU)	C2D051
	EJ1 Temperature (CompoWay/F)	C2D061
	KM100 (CompoWay/F)	C2D071
	3G3MV Inverter (RTU)	C2D081
Pan-Globe Corp.	E9 Temperature Series	C90001
	E904 Temperature (RTU)	C90011
	HT Series Temperature Controller	C90021
PanelMaster	Null PLC	C00001
	N-to-1 Master (COM)	C01001
	Multi-drop Client (COM)	C01011
	N-to-1 Master (Ethernet)	C01021
	General Device (COM)	C01051
	2-to-1 Server (COM)	C01061
	2-to-1 Transparent Server (COM)	C01062
	2-to-1 Client (COM)	C01071
	Serial Gateway Server	C010C1
	Data Sharer (RS485)	C01S01
	Modbus Master (RTU)	C2C041
	Modbus Master (RTU; Little Memory)	C2C042
	Modbus Master (RTU; Non-volatile slave data)	C2C043
	Modbus Device/Slave (RTU)	C2C051
	Modbus Device/Slave (Word order in big-endian)	C2C052
	Modbus Device/Slave (RTU; No block read)	C2C051
	Modbus Device/Slave (RTU, 30Words)	C2C051
	Modbus Device/Slave (ASCII)	C2C093
	Modbus Device/Slave (ASCII; No block read)	C2C093
	Barcode Scanner	cbcode
	Epson Matrix Printer	CEPSON0
	PC Series PLC Module	C1A001
PORIS	XC Modbus RTU	C2C031
RICH Electric Co., LTD.	EI-500 Series (RTU)	CEI500
	EI-9001 Series (RTU)	CEI9001
RKC Instrument Inc.	MA900/CB900 Series (RTU)	C82001
	CD/CH Series (ASCII)	C82002
Saia Burgess	PCD Series (S-Bus PGU)	C31001
	PCD Series (S-Bus, Data Mode)	C31003
Samwon Technology	NOVA Series (RTU)	C88001
Schneider Electric	ATV31 Inverter (RTU)	C2C051
	Lexium 23 Servo Controller (ASCII)	C16041
Sharp Corporation	JW10/20 Series	C5JW10
Shenzhen Step Servo Ltd.	Kinco Servo Controller	C50001
Shihlin Electric&Engineering Corp.	SH Inverter	CSH01
SHIMAX CO., LTD.	MAC3 Series (RTU)	CSHI01
Shinko Technos Co., Ltd.	CPT-20A MODBUS DEVICE/SLAVE (ASCII)	CSCCT1
	JCS-33A-R/M (Shinko Protocol)	CSJCS01
	JCS-33A-R/M (Modbus ASCII)	CSJCS11
Siemens AG	Simatic S7-200 (PPI; 1-to-1)	C39001
	Simatic S7-200 (PPI; Network)	C39011
	Simatic S7-300 (MPI Port)	C39021
	Simatic S7-300 (PC Adaptor)	C39031
	Simatic S5 3964R	C39041
	Simatic S5	C39051
Taian Automation Co.,Ltd.	TP03 Series (Modbus RTU)	C51011
	TP02 Series	C51021
Taiwan Instrument & Control Co., Ltd.	TAIE FY100/900 Series (RTU)	CFY001
	TAIE FY100/900 Series (TAIE)	CFY002
	FY series DIGITAL PID CONTROLLER	CTAIEFY
Teco Electric & Machinery Co.,Ltd.	TSDA Series AC Servo	C51001
	TP03 Series (Modbus RTU)	C51011
	TP02 Series	C51021
	TSTA Series AC Servo	C51031
TESHOW ELECTRONIC.	MY90V/MY40V Series (RTU)	CMY901
Texas Instruments Incorporated	TI505	CTI505
Thinget Electronic Co., Ltd.	XC Series Controller (RTU)	C89001
Tieon Electronics Co., Ltd.	IPC-03 Series (RTU)	C83001
TOHO Electronics Inc.	TTX-700 (Modbus RTU)	C3D001
	TTM-000 Series (TOHO Protocol)	C3D002
	TTM-200 Series (TOHO Protocol)	C3D003

Brand	Model	Driver
TOKY ELECTRICAL	DW8-CD18B	CTDW80
Toshiba Schneider Inverter Corporation	TOSVERT VF Series (Modbus RTU)	C84001
Unitronics	Vision 120 Series (Modbus RTU)	C4A001
Vertex Technology Co., Ltd	VT26/30 Series Controllers (RTU)	CVVT26
Vigor Corporation	M/VB Series	C42001
Wanfeng Electric	WF Series	C42001
YAMAHA MOTOR CO., LTD.	Single-axis Robot Controller ERCD	CYAERCD
Yamatake Corporation	SDC35/36 Temperature (RTU)	C44001
	SDC35/36 Temperature (ASCII)	C44011
	MA500 FA Controller (ECL Host)	C44021
	DMC10 Controller (RTU)	C44031
	DMC10 Controller (ASCII)	C44041
Yaskawa Corporation	MX30	CYaMX30
	MX50	CYaMX50
	Σ-ⅡSGDM/H Series AC Servo	C45001
	MP Series Controller (Memobus)	C45011
	V7 inverter (Memobus)	C45021
YE-LI ELECTRIC & MACHINERY Co., Ltd.	NS600 Servo Controller	C45031
	YPV Servo Controller	cyeli1
Yokogawa Electric Corporation	YJD Servo Controller	cyeli2
	FA-M3 Series (CPU Port)	C46001
Yudian Automation Technology Ltd.	AI-7048 (AiBus)	C47001
	AI518/708/808/518P/708P/808P Controller (Albus)	C47011
Zhuhai Motion Control Motor Co., Ltd.	BP Series PSDA driver (RTU)	C2CBP1

Communication Port (Ethernet)

Brand	Model	Driver
Allen Bradley	MicroLogix 1000/1500 via 1761-NET-ENI	C10E01
Astraada HMI	ModBus Master (TCP/IP)	C2C001
	ModBus Device/Slave (TCP/IP)	C2C011
	ModBus Master (TCP/IP; Type 2)	C2C101
	ModBus Device/Slave (TCP/IP; Type 2)	C2C111
CMZ Sistemi Elettronici	FCT Controllers (TCP/IP; Type 2)	Cmz111
DEIF A/S	TCP/IP Modbus (Ethernet port)	C2C112
EasyIO	EasyIO-30 (RTU)	C2C211
Fatek Automation Corp.	Fatek FBs/FBe (TCP)	C1A011
GE Corporation	SRTP Ethernet	C1E101
	SRTP Ethernet (Micro)	C1E102
Hitachi Industrial Equipment Systems Co., Ltd	EH/EHV Series (Ethernet; TCP)	C1F006
Honeywell	EH/EHV Series (Ethernet; UDP)	C1F007
Honeywell	BACnet/IP	cbacip
JETTER	JetControl 24x Series (Ethernet)	C24012
Lenze Drive Systems GmbH	E94AYCEN GCI/(TCP/IP) Protocol	CLZ003
Mirie Automation Corporation	Fama SoftPLC Ethernet	C19E01
	ModBus Device/Slave (TCP/IP)	C2C011
Mitsubishi Electric Corp.	Q Ethernet	C2BE11
	ModBus Master (TCP/IP)	C2C001
	ModBus Device/Slave (TCP/IP)	C2C011
Modicon Corp.	ModBus Master (TCP/IP; Type 2)	C2C101
	ModBus Device/Slave (TCP/IP; Type 2)	C2C111
Omron Corporation	Sysmac CS/CJ Series FINS/TCP	C2DE01
	N-to-1 Slave (Ethernet)	C01031
	TCP/IP Gateway Server	C010B1
PanelMaster	Data Sharer (UDP)	C01E01
	Modbus Device/Slave (TCP/IP)	C2C211
PORIS	XC ModBus TCP	C2C011
Saia Burgess	PCD Series (Ether-S-Bus)	C31007
Siemens AG	Simatic S7-300 Ethernet Module (CP343)	C39E01
	SIMATIC S7 (Ethernet)	C39E02
TPM	EPC-1000	CTEPC0
Yaskawa Corporation	ModBus Device/Slave (TCP/IP)	C45012
	Extended MEMOBUS	C45013

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 86-512-5777-5666	Taipei 886-2-2792-7818	Eindhoven 31-40-267-7000	Warsaw 48-22-33-23-730	Milpitas, CA 1-408-519-3800

Worldwide Offices

Greater China		Asia Pacific		Europe		Americas	
China		Japan		Germany		North America	
Toll Free	800-810-0345	Toll Free	0800-500-1055	Toll Free	00800-2426-8080	Toll Free	1-800-205-7940
Beijing	86-10-6298-4346	Tokyo	81-3-6802-1021	Münich	49-89-12599-0	Toll Free	1-888-576-9668
Shanghai	86-21-3632-1616	Osaka	81-6-6267-1887	Düsseldorf	49-211-97477-0	Cincinnati	1-513-742-8895
Shenzhen	86-755-8212-4222	Korea	Toll Free 080-363-9494	France	Paris 33-1-4119-4666	Milpitas	1-408-519-1788
Chengdu	86-28-8545-0198					Irvine	1-949-789-7178
Hong Kong	852-2720-5118	Seoul	82-2-3663-9494	Grenoble	33-4-7670-4700	Brazil	Toll Free 0800-770-5355
Taiwan		Singapore		Italy			
Toll Free	0800-777-111	Singapore	65-6442-1000	Milano	39-02-9544-961		
Rueiguang	886-2-2792-7818	Malaysia	Toll Free 1800-88-1809	Benelux & Nordics			
Yang Guang	886-2-2792-7818			Breda	31-76-5233-100		
Shing-Tien	886-2-2218-4567	Kuala Lumpur	60-3-7724-3555	Roosendaal	31-165-550-505		
Taichung	886-4-2378-6250	Penang	60-4-397-3788	UK	Oxfordshire	44-1491-681144	
Kaohsiung	886-7-229-3600		60-4-397-4188				
Hsinchu	886-3-543-0569	Indonesia	Jakarta	62-21-7690525	Poland	Warsaw	48-22-33-23-740 / 41
		Thailand	Bangkok	66-2-248-3140	Russia	Toll Free 8-800-555-01-50	Moscow 7-495-232-1692
		India	Toll Free 1800-425-5070	Bangalore	91-80-2337-4567		
		Australia	Toll Free 1300-308-531	Melbourne 61-3-9797-0100	Sydney 61-2-9482-2443		

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