

## eAutomation System Solutions

<b>The Basics of Web-enabled Automation</b>		<b>1-2</b>
<b>Advantech Studio</b>	Extending Powerful SCADA/HMI to the Web	<b>1-4</b>
<b>Web-enabled Operator Interface Terminals</b>		
<b>WebOIT-60 (New)</b>	5.7" QVGA STN Web-enabled Operator Interface Terminal	<b>1-6</b>
<b>WebOIT-1260</b>	12.1" SVGA TFT Web-enabled Operator Interface Terminal	<b>1-7</b>
<b>WebOIT-1560</b>	15" SVGA TFT Web-enabled Operator Interface Terminal	<b>1-8</b>
<b>Web-enabled Data Connection</b>		
<b>WebLink-2050</b>	Pentium III-grade Web-enabled Gateway with PC/104 Extension	<b>1-9</b>
<b>WebLink-2053</b>	Pentium III-grade Web-enabled Gateway with PC/104 Extension	<b>1-9</b>
<b>WebLink-2059</b>	586-based Web-enabled Device Connection with PC Card	<b>1-10</b>
<b>WebLink-2160</b>	Pentium III-grade Web-enabled Gateway with PC/104 Extension	<b>1-10</b>
<b>KW MULTIPROG</b>	IEC 61131-3 SoftLogic Control Software	<b>1-11</b>
<b>KW for Embedded Controller</b>	Embedded SoftLogic for UNO-2000 and ADAM Controller	<b>1-12</b>

# The Basics of Web-enabled Automation

## Maintenance

Technicians can monitor equipment and respond to problems more quickly



## Operators

SCADA/HMI software provides local operator control connection through a browser, allowing users to interact with the process from anywhere

## Support & Service

With better information available from anywhere at any time, your support & service staff can be more efficient



## Sales

Better information about manufacturing schedules and inventory levels enable new pricing and selling models



## Decision Makers

Real-time information through the internet can help manage inventory and reveal process bottlenecks.

## Web-Enabled Automation- What is it?

The word "automation" needs no definition, but what about "web enabled"? Web enabled means real time access to data and control virtually anytime and from anywhere it's required. This is a very broad claim, and statements like this have been and are being made all the time. So what's different now? To oversimplify a bit, we can now think in terms of merging the world of the "consumer Internet" (cheap, fast, readily available access to almost everything from anywhere at anytime) with the traditional automation world (expensive, proprietary, limited accessibility, islands of knowledge). Most importantly, this merging goes well beyond the "horizontal" integration of standard B2B and B2C implementations. Web enabled automation drives this real time accessibility "vertically" down to the level where things are actually being produced, ordered, shipped, tested, stocked, etc. Web enabled automation can also be thought of as "visible automation".

## What will web enabled automation do for me? Why do I need it?

So what can we do with this accessibility? We can now check production data on a critical process, machine, or orders in real time, without waiting on batch reports. Or, have a system notify a technician that it needs "help" via e-mail to a PC, PDA, or phone. Or, have a system linked in real-time to suppliers and customers to handle restocking or shipping. Or, collect data from many distributed machines or processes in real-time, analyze it, and send new optimized parameters back, all using the existing Internet/Intranet infrastructure. We now have a distributed, adaptive, closed loop factory.

OK, so some good, interesting, and useful things are possible. But why would anyone need this kind of access? Because all customers are coming to expect "real-time" deliveries

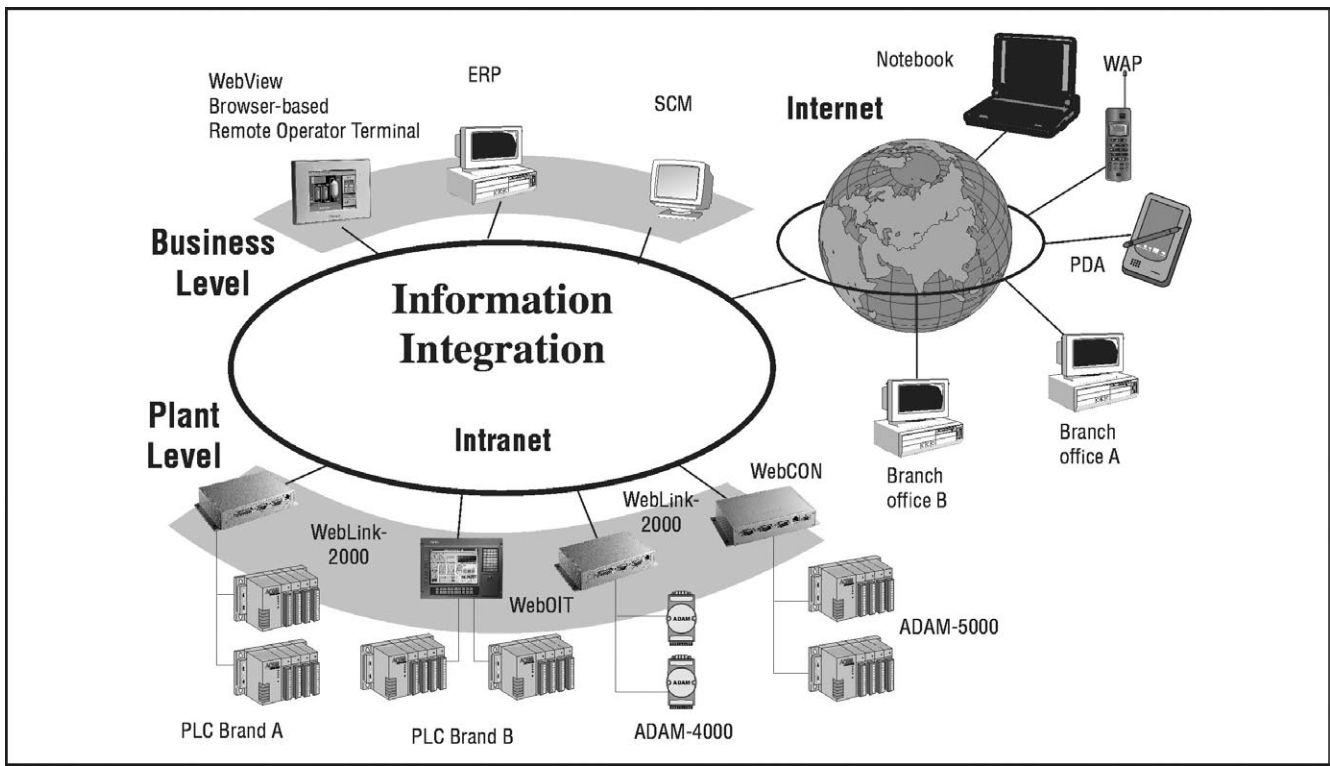
of product and information. As individual consumers we're being conditioned to expect this through our experiences with on-line ordering, status checking, and next day or same day deliveries of merchandise. Even more importantly, the competition will do it. And, once they have implemented web enabled automation successfully they'll be able to satisfy the customer more quickly and at a lower cost than non-web enabled companies. That's the real bottom line.

## How Web-enabled Automation Works

Now that we're convinced of the benefits of web enabled automation, what pieces and parts are required to put this technology to work? The basic parts required for web based data acquisition and control are :

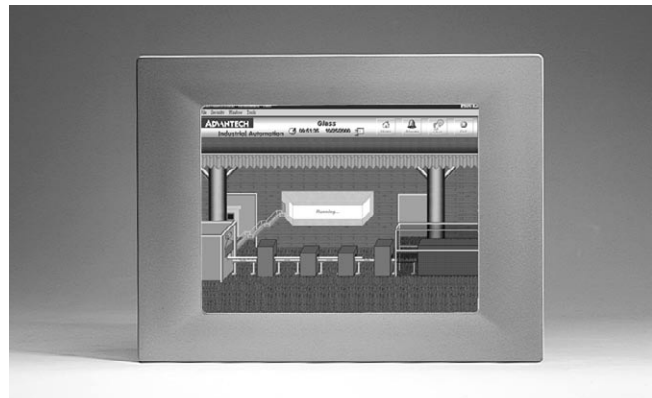
- 1) An interface to the machine/process/building/"thing" to be monitored or controlled via the web (network) connection.
- 2) A web server to make the desired display and/or control pages available to the remote browser, and
- 3) A data service or interface to handle exchanging data between the local "thing" (server) and the remote system (client).

For remote viewing of the data and/or web pages, the only requirement is a standard browser interface. For applications requiring SPC, optimization, or enterprise level software to exchange real time data with the "thing", a remote server PC and a compatible data exchange service are required.



**WebLink series**

**Embedded web-connectivity server:** Advantech's new WebLink was designed for this task. WebLink is a complete "intelligent embedded server" solution including all hardware and runtime software required to web enable a system. It can connect to a device (machine/process controller, I/O, sensor, etc.) using a standard RS-232/485 serial port or an optional Fieldbus adapter. A network connection is then made through WebLink's standard Ethernet 10/100BaseT port or via optional modem or wireless network/Internet connections. Development software enables web pages and data connections to remote application software to be easily created and maintained from anywhere via a network connection. Security is provided by WebLink through password protected user login and optional restricted access by user IP.



**WebOIT series**

**Embedded web-SCADA server:** For applications where a local HMI is required at the system to be web enabled, Advantech offers the WebOIT operator interface terminal. This product series combines the features of WebLink with an integrated LCD and HMI software functionality.

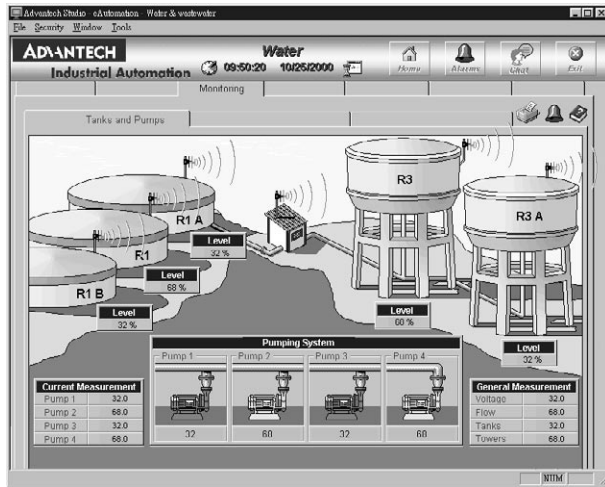
Advantech's WebOIT solution comes with everything needed to make a connection from your PLC to the Internet with Web-enabled automation technology. Utilizing its eAutomation features, WebOIT allows you to connect back to a shop floor from anywhere in the world via a simple Internet connection. To receive machine and process data in real-time enables managers to monitor production, troubleshoot processes and diagnose equipment problems regardless of their location.

1	Software
2	IPPC
3	TPC
4	FPM
5	ATM & AWS
6	DA&C
7	cPCI
8	ADAM-3000
9	Motion Control
10	ICOM
11	eConnectivity
12	UNO
13	ADAM-4000
14	ADAM-5000
15	ADAM-6000
16	ADAM-8000
17	BAS



# Advantech Studio

Web-enabled HMI/  
SCADA Software



## Features

- Publish real-time dynamic and animated graphic screens, trends, alarms, reports, and recipes to standard browsers
- Import and export recipes, reports and real-time data using the XML format
- Use the same development environment as applications running on Windows® NT/2000/XP and CE or on the Web
- Integrates seamlessly with your Windows® desktop applications (such as Microsoft® Word and Excel)
- View multiple clients from one Web browser
- Multi-level security for applications, including use over Intranets and Internet.
- Conforms to industry standards such as Microsoft® DNA, OPC, DDE, ODBC, XML, and ActiveX

## Introduction

Advantech Studio is a powerful, integrated collection of automation tools that includes all the building blocks required to develop modern Human Machine Interfaces (HMIs), and Supervisory Control and Data Acquisition System (SCADA) applications that run on Windows® NT/2000/XP and CE, or in an Internet / Intranet environment. A simple drag and drop, point and click development environment simplifies the most complex behavior of your live processes, but a flexible and easy-to-use scripting language is also available for special requirements. Advantech Studio is currently being used in nearly 2,000 installations worldwide.

Advantech Studio for Windows® CE is based on Advantech Studio's full scale supervisory control and monitoring system, and has almost all of the same features, including an object-oriented database, math functions, report generation, archiving, alarms, batch recipes, and interfaces for PLCs, remote I/O and TCP/IP networking. In other words, Advantech Studio for Windows CE is a full-function supervisory control and monitoring system that fits in the palm of your hand or can be embedded in the chipset of a low-cost operator interface. Advantech Studio for Windows® CE is software for complete supervisory control and process monitoring with an operator interface that is available for the Microsoft Windows® CE operating system platform.

## System Requirements

	Product Series or Part Number	WebLink, WebOIT	AS1500-WS60	AS1500-WR60	AS1500-WD60	AS4000-WS60	AS64K-WS60	AS512K-WS60	AS1500-CD60	AS4000-CD60
<b>Type</b>	S/W scope	CE Runtime	Local Interface Server	Local Interface Runtime	Local Interface Development	Operator Workstation Server	Control Room Server	Advanced Server	Local Interface Development for CE Runtime	Operator Workstation Development for CE Runtime
<b>Overview</b>	Web Server	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Development Tool OS	-	WinNT/2000/XP	-	WinNT/2000/XP	WinNT/2000/XP	WinNT/2000/XP	WinNT/2000/XP	WinNT/2000/XP	WinNT/2000/XP
	Runtime OS	WinCE	NT/2000/XP	NT/2000/XP	-	NT/2000/XP	NT/2000/XP	NT/2000/XP	-	-
	Local Viewer on Runtime	WebOIT only	✓	✓	-	✓	✓	✓	-	-
	Email Support	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Database</b>	Modem Dial-up Support	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Application Tags	up to 1,500	up to 1,500	up to 4,000	up to 1,500	up to 4,000	up to 64,000	up to 512,000	up to 1,500	up to 4,000
<b>Communication</b>	Security System	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Drivers	up to 3	up to 3	up to 3	up to 3	up to 5	up to 8	up to 8	up to 3	up to 3
	OPC Client	✓	✓	✓	✓	✓	✓	✓	✓	✓
	OPC Server	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TCP/IP Client	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TCP/IP Server	✓	✓	✓	✓	✓	✓	✓	✓	✓
Legend										
<b>Supported</b>	✓									
<b>D</b>	Determined by development version									
<b>Server</b>	Includes Development and Runtime license									

## Specifications

- **Pre-built Servers** Web Server, FTP Server, Telnet Server, Remote Access Server (RAS)
- **HMI Functions** 100+ built-in PLC drivers (up to 3 running simultaneously)  
8 simultaneous web clients  
OPC Client and Server  
Email (SMTP) Integration  
Fully featured dynamic graphics with object library  
Alarming, Trending, Reporting features  
Scripting Language with 100+ standard functions  
Recipes (ASCII and XML formats)  
Remote project management including online editing  
Multi-level security for use over Intranet and Internet

### Development Environment

- Microsoft® Windows® XP, 2000, NT 4.0 service pak 4 and higher
- Min. 256 MB of RAM. (Recommended 512 MB of RAM)
- 100 MB of free hard-disk space for installation
- CD-ROM driver (for installation only)

### Runtime Environment

- Windows® CE 4.2
  - Min. 32 MB of memory
- or
- Microsoft® Windows® 2000, Windows® XP, Windows® NT 4.0 Service Pack 4 and higher, Service Pack 2
  - Min. 32 MB of RAM. (Recommended 64 MB of RAM)
  - Web Browser that supports ActiveX objects

## Hardware Platforms Supported

- **WebOIT-60** 5.7" QVGA STN Web-enabled Operator Interface Terminal
- **WebOIT-1260** 12.1" SVGA TFT PII-grade Web-enabled Operator Interface Terminal
- **WebOIT-1560** 15" XGA TFT P-II grade Web-enabled Operator Interface Terminal
- **WebLink-2050** Pentium-grade Web-enabled Data Connection with Isolated DI/DO
- **WebLink-2053** Pentium-grade Web-enabled Data Connection with Dual LAN
- **WebLink-2059** Pentium-grade Web-enabled Data Connection with PC Card and 4 x RS-232/422/485
- **WebLink-2160** Pentium II-grade Web-enabled Data Connection with PC/104 extension

## Applications

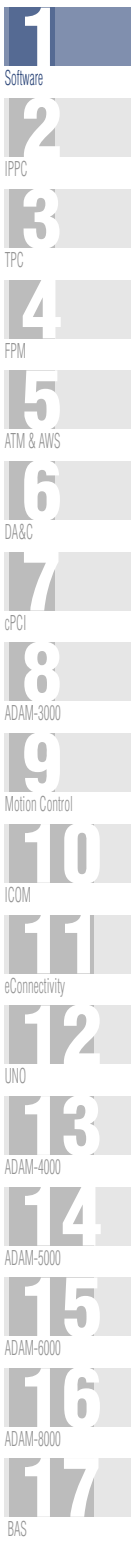
- Remote Utility Management
- Building Automation
- Water and Wastewater Management
- Factory Automation
- Machine Builder

## Ordering Information

- **AS1500-WS60** AStudio Development Kit Professional Edition for Windows® XP/2000/NT (Include DEV and RT Edition)
- **AS1500-WR60** AStudio Runtime Edition for Windows® XP/2000/NT
- **AS1500-WD60** AStudio Development Kit for Windows® XP/2000/NT
- **AS4000-WS60** AStudio Workstation Professional Edition for Windows® XP/2000/NT
- **AS64K-WS60** AStudio Control Room Professional Edition for Windows® XP/2000/NT
- **AS512K-WS60** AStudio Advanced Server Professional Edition for Windows® XP/2000/NT
- **AS1500-CD60** AStudio Development Kit for Windows® CE
- **AS4000-CD60** AStudio Workstation Development Kit for Windows® CE

## Communication Drivers

<b>Advantech</b>	ADAM-4000, ADAM-5000/485
<b>AEG Schneider (Modicon Square D Telemecanique)</b>	AEG Compact PLC*, ModCon 984E*, Quantum Family
	ModCon 984E* Ethernet Quantum Ethernet Family
	MODBUS Plus compatible equipment
	Symax
<b>Allen-Bradley</b>	Family PLC2
	Family PLC5
	Family SLC500
	Family 5000
<b>Cutler-Hammer</b>	D50*, D300
<b>GE-Fanuc</b>	Series 90, 90/30 CPU 341*
<b>Mitsubishi</b>	FX-232AW
<b>Omron</b>	C-series Rack PCs
	Sysmac way
	Host link units
	Sysmac C200H*
	E5CK / E5AF
<b>Phoenix</b>	Interbus Compatible
<b>Siemens</b>	S5 (PG port)
	S5/S7 3964R, S7 (MPI)
	Profibus DP Slave Compatible
	Profibus DP Master Compatible
	Profibus FMS Compatible
	S5-945 PG Port
<b>Yokogawa</b>	MXT521
	UT35
	HR2500E
	DA100
	UT37/UT38
	UT750, UP750, UT550, UT520, UP550, UT350, UT320, UM350, UM330, UP350
	YS100
<b>InterBus</b>	-
<b>Modbus Ethernet</b>	-
<b>Modbus</b>	RTU/ASCII
<b>OPC</b>	-



# WebOIT-60

## Web-enabled Operator Interface Terminal with 5.7" QVGA STN Display



### Features

- 5.7" QVGA color STN LCD
- Super slim and compact design with plastic housing
- Fanless cooling system
- NEMA4/IP65 compliant front panel
- Remote manageability
- Built-in flash memory and Windows® CE .NET OS
- One CompactFlash® slot
- Automatic data flow control RS-485
- Advantech Studio Runtime Software pre-built

### Introduction

The WebOIT-60 models are compact platforms without redundant functions, which have been designed for small-sized operator interface applications. They have a 5.7" STN LCD display which is a cost effective choice for a limited budget. Its RISC kernel, the Samsung® ARM9 processor, consumes minimum power without sacrificing performance. The WebOIT-60 has a 10/100Base-T Ethernet port offering solid communication ability and comes bundled with a Windows® CE .NET OS that supports Thin-Client solutions. The built-in Windows® CE .NET OS platform lets WebOIT-60 become an open HMI solution for system integration.

### Specifications

- **Construction** Plastic molding housing
- **Display** 5.7" QVGA STN LCD
- **CPU / Core logic** Samsung® ARM9 266 MHz
- **VGA** Controlled by CPU
- **Memory** 64 MB SDRAM on board
- **Storage** 64 MB flash memory on board, 1 CompactFlash® card (option)
- **I/O** 3 serial ports (one full RS-232, one 4-pin RS-232, one RS-485, 1 Ethernet port (10/100Base-T), 2 USB ports (one Host, one Client)
- **Watchdog Timer** Programmable as 250 ms, 500 ms, 1 second
- **Power Input** 24 V<sub>DC</sub>, 0.5A maximum
- **Dimensions (W x H x D)** 195 x 148 x 44.4 mm (7.68" x 5.83" x 1.75")
- **Weight** 0.8 kg (1.76lbs)

#### LCD Display

- **Display Type** STN color LCD (TPC-60S)
- **Display Size (diagonal)** 5.7"
- **Max. Colors** 256
- **Resolution** 320 x 240
- **Pixel Pitch (HxV)** 0.36 x 0.36 mm
- **Viewing Angle** 110°
- **Luminance (cd/m<sup>2</sup>)** 201 cd/m<sup>2</sup>
- **Backlight** 1 CCFL
- **Contrast ratio** 35

#### Touchscreen

- **Type** 4-wire, analog resistive
- **Resolution** Continuous
- **Light Transmission** Above 75%
- **Life** 1 million activation minimum at single point

### Environmental Specifications

- **Storage Temperature** -20 ~ 70° C (-4 ~ 158 °F)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122 °F)
- **Relative Humidity** 10 ~ 95% @ 40° C, non-condensing
- **EMI** FCC class B certification
- **Vibration** 1 G
- **Front panel meets** NEMA4 / IP65

### Software Specifications

- **Operating System** Windows® CE .NET
- **Pre-built Servers** Web Server, FTP Server, Telnet Server, Remote Access Server (RAS)
- **HMI Functions** Advantech Studio Runtime with:
  - 1500 application tags (default)
  - 100+ built-in PLC drivers (up to 3 running simultaneously)
  - 8 simultaneous web clients
  - OPC Client and Server
  - Email (SMTP) Integration
  - Fully featured dynamic graphics with object library
  - Alarming, Trending, Reporting features
  - Scripting Language with 100+ standard functions
  - Recipes (ASCII and XML formats)
  - Remote project management including online editing
  - Multi-level security for use over Intranet and Internet

### Ordering Information

- **WebOIT-60** Web-enabled Operator Interface Terminal with 5.7" QVGA STN Display
- **PS-DC24-50** 50 Watts 24 V<sub>DC</sub> output, 110 V/220 V<sub>DC</sub> 50/60 Hz input power adapter
- **AS1500-CD60** AStudio Development Kit for Windows® CE

# WebOIT-1260

## Web-enabled Operator Interface Terminal with 12" SVGA TFT Display



CE FCC UL

### Features

- Bright or Economical 12.1" SVGA TFT LCD with Touchscreen
- 500 MHz Transmeta Crusoe Processor
- NEMA4/IP65 compliant front panel
- Fanless and Diskless for high reliability
- Windows® CE .NET Operating System
- Advantech Studio Runtime Included
- 100+ PLC Drivers Included
- Integrated Web, Telnet, RAS, and FTP Servers
- Email SMTP support
- Alarms, Trends, Reports, Graphics, and Recipes are easily created and displayed to LCD display and through web server to Internet Explorer web browsers

### Introduction

Packed full with features, the WebOIT-1260/TE is not a typical Operator Panel. Taking advantage of the Windows® CE .NET operating system and the Advantech Studio Runtime software, the connectivity and flexibility options are unmatched by other simple operator panels. Take advantage of the WebOIT-1260/TE's open PC-Based architecture to create a robust and reliable operator interface with unsurpassed connectivity.

### Specifications

#### Hardware

- **Construction** Al-Mg front bezel and plastic back housing
- **Display** 12.1" SVGA TFT LCD
- **Max. Colors** 256 K or above
- **Resolution** 800 x 600
- **Luminance** 300 cd/m<sup>2</sup> (1260T), 100 cd/m<sup>2</sup> (1260TE)
- **Backlight** 2 CCFL (1260T), 1 (1260TE)
- **CPU** Transmeta™ Crusoe™ 5400 (500 MHz)
- **RAM** 128 MB on board, with 112 MB allocated for users
- **Storage** Industrial grade CompactFlash® (64 MB standard)
- **I/O** 3x RS-232 serial ports, 1x RS-232/422/485 serial port, 1x parallel port, 1x 10BaseT Ethernet port, 1x USB port, 2x PS/2 ports
- **Touchscreen** Type 4-wire, analog resistive
- **Touchscreen Life** 1 million activation minimum
- **Power Input** 24 V<sub>DC</sub>, 0.8 A maximum
- **Dimensions (W x H x D)** 311 x 237 x 50 mm (approx 12 x 9 x 2 in)
- **Weight** 2.2 kg (4.85 lbs)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Relative Humidity** 10 ~ 95% @ 40° C, non-condensing
- **EMI** FCC class A certificated
- **CE, UL Certified**
- **Front panel meets NEMA4/IP65**

#### Software

- **Operating System** Windows® CE .NET
- **Pre-built Servers** Web Server, FTP Server, Telnet Server, Remote Access Server (RAS)
- **HMI Functions** Advantech Studio CE Runtime with:
  - 1500 application tags (default)
  - 100+ built-in PLC drivers (up to 3 running simultaneously)
  - 8 simultaneous web clients
  - OPC Client and Server
  - Email (SMTP) Integration
  - Fully featured dynamic graphics with object library
  - Alarming, Trending, Reporting features
  - Scripting Language with 100+ standard functions
  - Recipes (ASCII and XML formats)
  - Remote project management including online editing
  - Multi-level security for use over Intranet and Internet

### Ordering Information

- **WOIT-1260** Web-enabled Operator Interface Terminal with 12" SVGA TFT Display
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)

1	Software
2	IPPC
3	TPC
4	FPM
5	ATM & AWS
6	DA&C
7	cPCI
8	ADAM-3000
9	Motion Control
10	ICOM
11	eConnectivity
12	UNO
13	ADAM-4000
14	ADAM-5000
15	ADAM-6000
16	ADAM-8000
17	BAS

# WebOIT-1560

## Web-enabled Operator Interface Terminal with 15" XGA TFT Display



### Features

- Bright 15" XGA TFT LCD with Touchscreen
- 500 MHz Transmeta™ Crusoe™ Processor
- NEMA4/IP65 compliant front panel
- Fanless and Diskless for high reliability
- Windows® CE .NET Operating System
- Advantech Studio Runtime Included
- 100+ PLC Drivers Included
- Integrated Web, Telnet, RAS, and FTP Servers
- Email SMTP support
- Alarms, Trends, Reports, Graphics, and Recipes are easily created and displayed to LCD display and through web server to Internet Explorer web browsers

### Introduction

Packed full with features, the WebOIT-1560T is not a typical Operator Panel. Taking advantage of the Windows® CE .NET operating system and the Advantech Studio Runtime software, the connectivity and flexibility options are unmatched by other simple operator panels. Take advantage of the WebOIT-1560T's open PC-based architecture to create a robust and reliable operator interface with unsurpassed connectivity.

### Specifications

#### Hardware

- **Construction** Al-Mg front bezel and plastic back housing
- **Display** 15" XGA TFT LCD
- **Max. Colors** 256 K or above
- **Resolution** 1024 x 768
- **Luminance** 350 cd/m<sup>2</sup>
- **Backlight** 4 CCFL
- **CPU** Transmeta™ Crusoe™ 5400 (500 MHz)
- **RAM** 128 MB on board, with 112 MB allocated for users
- **Storage** Industrial grade CompactFlash® (64 MB standard)
- **I/O** 2x RS-232 serial ports, 1x RS-232/422/485 serial port, 1x parallel port, 1x 10BaseT Ethernet port, 2x USB ports, 1x PS/2 port, 2x PCMCIA slots, 1x VGA port, 1x MIC/ line out
- **Touchscreen** Type 4-wire, analog resistive
- **Touchscreen Life** 1 million activation minimum
- **Power Input 2** 4 V<sub>DC</sub>, 1 A maximum
- **Dimensions (W x H x D)** 383 x 307 x 55 mm (approx 15 x 12 x 2 in)
- **Weight** 3.8 kg (8.37 lbs)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Relative Humidity** 10 ~ 95% @ 40° C, non-condensing
- **EMI** FCC class A certificated, BSMI certificated
- **CCC, CE, UL Certified**
- **Front panel meets NEMA4/IP65**

#### Software

- **Operating System** Windows® CE .NET
- **Pre-built Servers** Web Server, FTP Server, Telnet Server, Remote Access Server (RAS)
- **HMI Functions** Advantech Studio CE Runtime with:
  - 1500 application tags (default)
  - 100+ built-in PLC drivers (up to 3 running simultaneously)
  - 8 simultaneous web clients
  - OPC Client and Server
  - Email (SMTP) Integration
  - Fully featured dynamic graphics with object library
  - Alarming, Trending, Reporting features
  - Scripting Language with 100+ standard functions
  - Recipes (ASCII and XML formats)
  - Remote project management including online editing
  - Multi-level security for use over Intranet and Internet

### Ordering Information

- **WOIT-1560** Web-enabled Operator Interface Terminal with 15" XGA TFT Display
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)



# WebLink-2050 WebLink-2053

**Pentium-grade Web-enabled Gateway  
with 16-ch Isolated DI/O**

**Pentium-grade Web-enabled Gateway  
with Dual LAN**



WebLink-2050

## Specifications

- **CPU** NS Geode™ GX1-300MHz, with 64MB SDRAM on-board
- **VGA/Keyboard/Mouse** DB-15 VGA connector, PS/2 keyboard & mouse
- **Serial Port** 2 x standard RS-232 ports  
2 x isolated RS-232/422/485 ports
- **8-ch Isolated Digital Input** 2000 V<sub>DC</sub> isolation, 2000 V<sub>DC</sub> ESD protection  
- 0 ~ 50 V<sub>DC</sub> input range and 10 kHz speed, Interrupt handling
- **8-ch Isolated Digital Output** 2000 V<sub>DC</sub> isolation and 200 mA max/channel sink current  
- Keep output status after system hot reset  
- 5 ~ 40 V<sub>DC</sub> output range and 10 kHz speed.
- **LAN** 2 x 10/100 Base-T RJ-45 ports
- **SSD** One internal Type I/Type II CompactFlash® card slot
- **HDD** Offer HDD extension kit for installation of one standard 2.5" HDD
- **LED** Power LED, IDE LED, and one programmable LED, buzzer
- **Power Supply** 9 ~ 36 V<sub>DC</sub>
- **Anti-Shock** 20 G @ DIN IEC 68 section 2-27, half sine, 11 ms  
50 G @ Wall/Panel IEC 68 section 2-27, half sine, 11 ms
- **Anti-Vibration** 2 G w/ CF @ IEC 68 section 2-6, sine, 5 ~ 500 Hz, 10ct./min, 1hr/axis  
1G w/ HDD @ IEC 68 section 2-6, sine, 12 ~ 300 Hz, 10ct./min, 1 hr/axis
- **Operating Temperature** -10 ~ 55°C (14 ~ 131°F) @ 5 ~ 85% relative humidity
- **Relative Humidity** 95% @ 40°C
- **Power Consumption** 0.6 A max @ +24 V<sub>DC</sub> input or 1.2 A max @ +12 V<sub>DC</sub> input
- **Power Requirement** 1 A typical @ +24 V<sub>DC</sub> input or 1.5 A typical @ +12 V<sub>DC</sub> input
- **Chassis size (WxDxH)** 188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")
- **Weight** 0.8 kg

## Ordering Information

- **WLINK-2050** Pentium-grade Web-enabled Gateway with 16-ch Isolated DI/O
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)



WebLink-2053

## Specifications

- **CPU** NS Geode™ GX1-300 MHz, with 64 MB SDRAM on-board
- **VGA/Keyboard/Mouse** DB-15 VGA connector, PS/2 keyboard & mouse
- **Serial Port** 2 x standard RS-232 ports
- **USB Interface** Two USB ports, USB OpenHCI, Rev. 1.0 compliant
- **LAN** 2 x 10/100 Base-T RJ-45 ports
- **PC Card** One PC Card slot  
- Support CardBus (Card-32) Card and 16-bit (PCMCIA 2.1/JEIDA4.2) card  
- Support +5 V, +3.3 V and +12 V @ 120 mA working power
- **SSD** One internal Type I/Type II CompactFlash® card slot
- **HDD** Offer HDD extension kit for installation of one standard 2.5" HDD
- **LED** Power LED, IDE LED
- **Power Supply** 10 ~ 30 V<sub>DC</sub>
- **Anti-Shock** 20 G @ DIN IEC 68 section 2-27, half sine, 11ms  
50 G @ Wall/Panel IEC 68 section 2-27, half sine, 11 ms  
2 G w/ CF @ IEC 68 section 2-6, sine, 5 ~ 500 Hz, 10ct./min, 1 hr/axis  
1 G w/ HDD @ IEC 68 section 2-6, sine, 12 ~ 300 Hz, 10ct./min, 1 hr/axis
- **Anti-Vibration** -10 ~ 55°C (14 ~ 131°F) @ 5 ~ 85% relative humidity
- **Operating Temperature** 95% @ 40°C
- **Relative Humidity** 0.6 A max @ +24 V<sub>DC</sub> input or 1.2 A max @ +12 V<sub>DC</sub> input
- **Power Consumption** 1A @ +24 V<sub>DC</sub> power input  
1.5 A @ +12 V<sub>DC</sub> power input
- **Power Requirement** 188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")
- **Chassis size (WxDxH)** 0.8 kg
- **Weight**

## Ordering Information

- **WLINK-2053** Pentium-grade Web-enabled Gateway with Dual LAN
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)

- 1 Software
- 2 IPCC
- 3 TPC
- 4 FPM
- 5 ATM & AWS
- 6 DA&C
- 7 cPCI
- 8 ADAM-3000
- 9 Motion Control
- 10 ICOM
- 11 eConnectivity
- 12 UNO
- 13 ADAM-4000
- 14 ADAM-5000
- 15 ADAM-6000
- 16 ADAM-8000
- 17 BAS

# WebLink-2059

# WebLink-2160

**Pentium-grade Web-enabled Gateway  
with 4 x RS-232/422/485 ports**

**Pentium III-grade Web-enabled Gateway  
with PC/104 Extension**



WebLink-2059

## Specifications

- **CPU** NS Geode™ GX1-300 MHz, with 64 MB SDRAM on-board
- **VGA/Keyboard/Mouse** DB-15 VGA connector, PS/2 keyboard & mouse
- **Serial Port** 2 x standard RS-232 ports  
2 x RS-232/422/485 ports
- **USB Interface** Two USB ports, USB OpenHCI, Rev. 1.0 compliant
- **LAN** One 10/100 Base-T RJ-45 ports
- **PC Card** One PC Card slot  
- Support CardBus (Card-32) Card and 16-bit (PCMCIA 2.1/JEIDA4.2) card  
- Support +5 V, +3.3 V and +12 V @ 120 mA working power
- **SSD** One internal Type I/Type II CompactFlash® card slot
- **HDD** Offer HDD extension kit for installation of one standard 2.5" HDD
- **LED** Power LED, IDE LED, and one programmable LED, buzzer
- **Power Supply** 9 ~ 36 V<sub>DC</sub>
- **Anti-Shock** 20 G @ DIN IEC 68 section 2-27, half sine, 11 ms  
50 G @ Wall/Panel IEC 68 section 2-27, half sine, 11 ms  
2 G w/ CF @ IEC 68 section 2-6, sine, 5 ~ 500 Hz,  
10Oct./min, 1hr/axis- 1G w/ HDD @ IEC 68 section 2-6,  
sine, 12 ~ 300 Hz, 10Oct./min, 1hr/axis
- **Operating Temperature** -10 ~ 55°C (14~131°F) @ 5 ~ 85% relative humidity
- **Relative Humidity** 95% @ 40°C
- **Power Consumption** 0.6 A max @ +24 V<sub>DC</sub> input or 1.2 A max @ +12 V<sub>DC</sub> input
- **Power Requirement** 1 A typical @ +24 V<sub>DC</sub> input or 1.5 A typical @ +12 V<sub>DC</sub> input
- **Chassis Size (WxDxH)** 188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")
- **Weight** 0.8 kg

## Ordering Information

- **WLINK-2059** Pentium-grade Web-enabled Gateway with 4 x RS-232/422/485 ports
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)



WebLink-2160

## Specifications

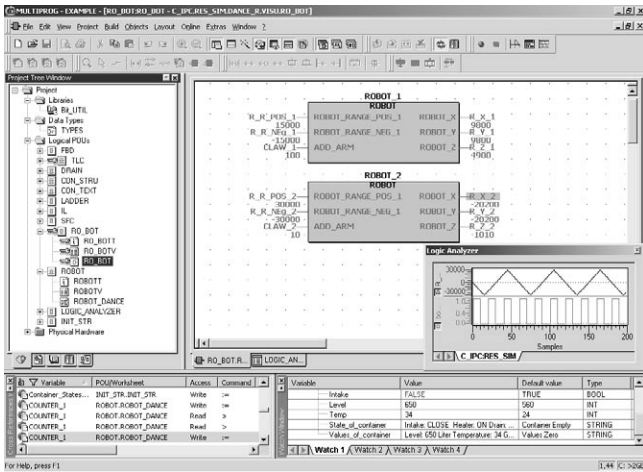
- **CPU** Celeron® 400 MHz Ultra low-voltage version, 256 MB SDRAM
- **VGA/Keyboard/Mouse** DB-15 VGA connector, PS/2 keyboard & mouse
- **Serial Port** 2 x standard RS-232 ports  
2 x RS-232/422/485 ports
- **USB Interface** Two USB ports, USB UHCI, Rev. 1.1 compliant
- **LAN** 2 x 10/100 Base-T RJ-45 ports
- **Printer Port** One printer port
- **PC Card** One PC Card slot  
- Support CardBus (Card-32) Card and 16-bit (PCMCIA 2.1/JEIDA4.2) card  
- Support +5V, +3.3V and +12 V @ 120 mA working power
- **SSD** One internal Type I/Type II CompactFlash® card slot
- **HDD** Offer HDD extension kit for installation of one standard 2.5" HDD
- **LED** Power LED, IDE LED, Alarm for RAM backup battery
- **Power Supply** 9 ~ 36 V<sub>DC</sub>
- **Anti-Shock** 20 G @ DIN IEC 68 section 2-27, half sine, 11ms  
50 G @ Wall/Panel IEC 68 section 2-27, half sine, 11ms  
2 Grms w/ CF @ IEC 68 section 2-64, random, 5 ~ 500 Hz,  
10Oct./min, 1hr/axis- 1 G w/ HDD @ IEC 68 section 2-64,  
random, 5 ~ 500 Hz, 10Oct./min, 1hr/axis
- **Operating Temperature** -10 ~ 50°C (14~122°F) @ 5 ~ 85% relative humidity
- **Relative Humidity** 95% @ 40°C
- **Power Consumption** Max. 35 W
- **Chassis Size (WxDxH)** 255 x 152 x 50 mm (10.0" x 6.0" x 2.0")
- **Weight** 1.6 kg

## Ordering Information

- **WLINK-2160** Pentium III-grade Web-enabled Gateway with PC/104 Extension
- **PS-DC24-50** 50 watt 24 V<sub>DC</sub> Power Supply
- **AS1500-CD60** Advantech Studio Development Software (1500 tags)
- **AS4000-CD60** Advantech Studio Development Software (4000 tags)

# KW MULTIPROG®

## IEC 61131 SoftLogic Control Software



### Features

- IEC 61131-3 Programming languages
- Intuitive programming with a clear project structure
- Cross-compiling: FBD, LD and IL can be cross-compiled to each other
- Multi user functionality shortens programming time
- Management of distributed controls
- Network variables: Easy and powerful configuration of distributed communication
- Powerful debugging tools: Online changes, PLC simulation, Overwriting & forcing, breakpoints, watch windows & recipes, Logic analyzer, and cross reference.

### Introduction

MULTIPROG® supports all IEC 61131-3 programming languages. Depending on the task to be handled, your experience and company standards, you may choose one of the five standardized programming languages. The use of MULTIPROG offers you many advantages. Our long-term experience in the automation industry guarantees you a sophisticated software product.

The open architecture of MULTIPROG provides a new direction in the creation of automation software. MULTIPROG Automation Interface guarantees consistent data. Via the automation interface, MULTIPROG opens its data for other tools. MULTIPROG allows external creation and modification of its project data. Furthermore, specific attributes can be added. As all essential data can be displayed in MULTIPROG, frequent switching between different tools during PLC programming and commissioning is no longer necessary. Observers guarantee data consistency with other tools, thus the engineering effort for the programming of PLCs is reduced.

### Reliability by Experience

KW MULTIPROG is based on an embedded softlogic controller that has been applied in the automation industry since 1991. With over 250,000 runtime installations worldwide, a sophisticated and reliable product is available which is continuously adapted to new technologies.

### Specifications

#### Hardware Requirements

Device	Minimum	Recommended
IBM compatible PC with Pentium Processor	200 MHz	350 MHz
System RAM	64 MB	128 MB
Hard Disk	60 MB free memory space	
CD ROM drive		
VGA Monitor Color Settings	256 colors	True color
Resolution	800 x 600	1024 x 768
RS-232 interface	Optional	
Mouse	Recommended	

#### Advantech Hardware Supported

- UNO-2000 Series
- ADAM-5510 Series
- WebOIT Series

#### Software Requirements

- Microsoft® Windows® NT 4.0 SP5 or Windows® 2000/XP
- Microsoft® Internet Explorer 5.02 or above

#### IEC 61131-3 Programming Languages (all supported)

- Instruction List (IL)
- Structured Text (ST)
- Function Block Diagram (FBD)
- Ladder Diagram (LD)
- Sequential Function Chart (SFC)

All programming languages can be mixed within one project.

### Ordering information

- **MPROG-BAS33** KW Multiprog Softlogic Development Kit Basic Edition v3.3 for Windows® NT/2000/XP (128 byte I/O)
- **MPROG-ADV33** KW Multiprog Softlogic Development Kit Advanced Edition v3.3 for Windows® NT/2000/XP
- **PROCON-NT32** KW ProConOS Runtime License v3.2 for Windows® NT/2000/XP
- **PROCON-NTOPC20** KW ProConOS OPC Server Runtime License V 1.12 for Windows® NT/2000/XP
- **PROCON-CEOPC20** KW ProConOS OPC Server Runtime License v2.0 for Windows® CE

- 1 Software
- 2 IPPC
- 3 TPC
- 4 FPM
- 5 ATM & AWS
- 6 DA&C
- 7 cPCI
- 8 ADAM-3000
- 9 Motion Control
- 10 ICOM
- 11 eConnectivity
- 12 UNO
- 13 ADAM-4000
- 14 ADAM-5000
- 15 ADAM-6000
- 16 ADAM-8000
- 17 BAS

## KW for Web-enabled Controllers

Advantech's new Web-enabled Controller series brings together the power of WebLink & WebOIT web-enabled automation products with next generation embedded softlogic technology. The Web-enabled Controller product series adds real-time programming languages based on the globally recognized IEC 61131-3 standard to Advantech Studio, our embedded, web-enabled HMI software system. And, of course our Web-enabled Controller series brings this functionality together in a cost-effective and reliable embedded hardware package. Web-enabled control means local control with global connectivity!

### Industry standard IEC 61131-3 programming

For faster time-to-market and reduced support costs, take advantage of programming support for the five globally recognized PLC languages: Ladder Diagram, Function Block, Sequential Function Chart, Structured Text, and Instruction List. Develop your application in any one of the five languages, or use any combination that fits your development needs.

### Real-time logic execution

Web-enabled Controllers offers real-time, deterministic execution of your application code down to 1 milli-second resolution. Take advantage of Web-enabled Controller's optimized logic runtime engine that automatically compiles your IEC-61131 application code for maximum performance. Web-enabled Controller brings the benefits of real-time control to a cost effective, web-enabled platform, so you can take advantage of local real-time control with a wide range of remote monitoring and management features. All this integrated into one package!

### Integrated development environment

Web-enabled Controllers brings integrated programming of logic and HMI to simplify programming and maintenance tasks. Integrated and synchronized database management eliminates the need to create and track multiple database items for HMI and logic programs, with the benefits of reduced programming time and fewer startup errors for your project. And, take advantage of Web-enabled Controller's powerful on-line debugging tools to quickly track down and correct programming errors.

### Broad range of I/O support

The Web-enabled Controller product series offers flexible I/O support to meet a wide range of application requirements. Take advantage of Web-enabled Controller's powerful integrated HMI and logic functions in combination with an array of distributed serial and Ethernet I/O products, or choose a platform with fully integrated I/O for maximum performance and cost effectiveness.

### Automatic remote handling of events, alarms via e-mail

Web-enabled Controller offers all the benefits of Advantech's web-enabled eAutomation product line, including full support for automated alarm and event handling. Track local conditions and generate reports based on time, event, or exception conditions, then automatically issue reports or alarms via pager or e-mail worldwide! By monitoring conditions and trends in real time, Web-enabled Controllers offers the possibility to predict failures before they cause service interruptions or lost production. Protect and optimize the investment in your machine, process, or facility with Web-enabled Controllers.

### Browser-only client for remote monitoring

With Web-enabled Controllers, use Internet Explorer or Netscape browser software to remotely (via Intranet or Internet) monitor or control your machine, process, or facility. This offers true "zero cost" remote access with full security capability, so you can efficiently monitor and troubleshoot from anywhere in the world. Take advantage of this feature to lower your service costs and reduce or eliminate downtime.

### Open interfaces for maximum flexibility

WebControl brings the power of PC-based automation to the embedded world. Take advantage of the open architecture of the eAutomation family, with support for standard connectivity interfaces like OPC, XML, and SNMP. Easily integrate WebControl into your existing factory or building network structure and take advantage of the benefits of local control with global connectivity!

## Web-enabled Controllers

