ULTRA SLIMPAK® II
WVC16
Communications Interface

Provides Ethernet Connection for
Ultra SlimPak II Modules

- Interface with up to 32 Signal Conditioning Modules
- Bussed Power with Plug-in Power Clips
- Removable Terminals for Easy Service
- Battery Backed Data
- NO Programming Required

Description

The Ultra SlimPak II Communications Interface adds functionality never before found in a signal conditioning system. A single WVC16 interfaces with as many as 32 Ultra SlimPak II devices by means of an internal infrared communications link. Through an Ethernet link in the WVC16, the information can then made available over the user's intranet. This powerful combination allows the user to view process data on a near real time basis, perform data logging functions on specified modules, view diagnostic information, and (under certain conditions) calibrate the modules remotely.

The WVC16 can send email messages to people who might need to be notified when an alarm condition exists. It can also send an email message letting maintenance personnel know when it's time to perform calibration checks. All of this functionality is made possible by a signed Java applet which is (transparently) downloaded to run on the client's computer. Using an applet rather than a traditional web page allows data to be updated in near real time. The applet provides access to the signal conditioner's data, which includes:

- Module configuration summary
- Module configuration editing
- Diagnostic/warning status
- Alarm setup & status
- E-mail setup, editing & address book
- Process variable viewing
- Data logging capabilities

All memory to support the signal conditioner's historical data is battery backed. The web pages and all e-mail messages are stored in non-volatile memory.

The Software

There are two software programs built into the WVC16. The first is a web server that provides the connection between the WVC16 and the client's computer. The second is the Ultra SlimPak II Data Viewer applet.

The web server (see Figure 1) is the "Home" page. Other functions can be selected from there. The Statistics frame contains information on the Ethernet connection, the frames sent and received, as well as information about the infrared bus between the modules. An Error Log will list any errors that have occurred. The Help file contains the entire user instruction manual for the WVC16.

The Data Viewer applet is launched from the Home page. Note that in order to install the Data Viewer, you must first have the Java Runtime Environment (JRE) 1.3.1 (or greater) plug-in installed on the client machine. If the plug-in has not been installed, the web browser will detect the fact and automatically connect to Sun Microsystems Java site in order to download and install the plug-in. Once the plug-in is installed, the Data Viewer will download and open.

The Data Viewer is used to view process data, define data logging parameters, and set up e-mail and address book information. The applet runs in a window of its own. The window shows all of the modules connected to the WVC16 (see Figure 2). The data logging function is defined in this window. Note that data logging is not simultaneous data from channel to channel - there is a time delay from sample to sample, as well as network delays that may need to be considered. The time-stamped data gathered here would then be downloaded to a program like MS Excel for further analysis.

Clicking on a module name brings up a window showing the signal connected to the selected module. From this window, the input and output ranges can be viewed, high and low alarm limits can be set, and module calibration can be performed. The About tab will list the firmware revision, the current temperature of the module, the high and low temperature to which the module has been subjected, and the number of hours it has been in operation.

Eurotherm®

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LED Indicators

There are six LED indicators, in two groups of three, that can be viewed through the translucent front cover. They are located down the left side of the unit. There is also a power LED located on the right side of the unit. There functions are described as follows:

POWER (Green):

On when 9 to 30VDC is applied to the unit.

(Upper Group)

ERROR (Red):

Flashes if a module error has been logged into the non-volatile SRAM or if the battery was disabled prior to applying power.

CONNECT (Green):

On to indicate Ethernet Client connection.

Flashes if no connection.

Off if network parameters need to be set.

MODULE (Yellow):

On when modules are detected on IR bus.

Flashes if no modules are detected on IR bus.

(Lower Group)

OFFLINE (Red):

On to indicate a network socket connection fault.

TRAFFIC (Yellow):

On to indicate 10Base-T transmit/receive and collision activity.

LINK (Yellow):

On to indicate 10Base-T link activity.

Figure 1: The Webserver Home Page

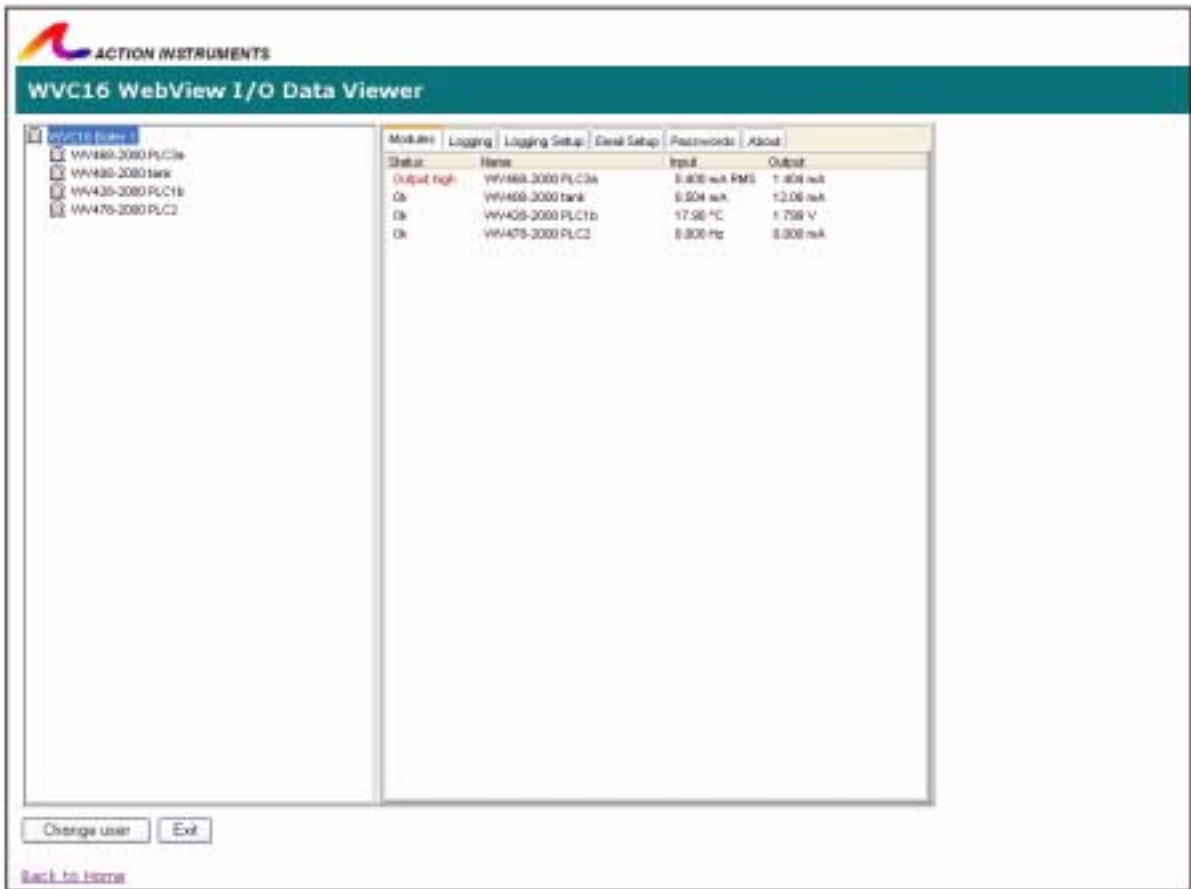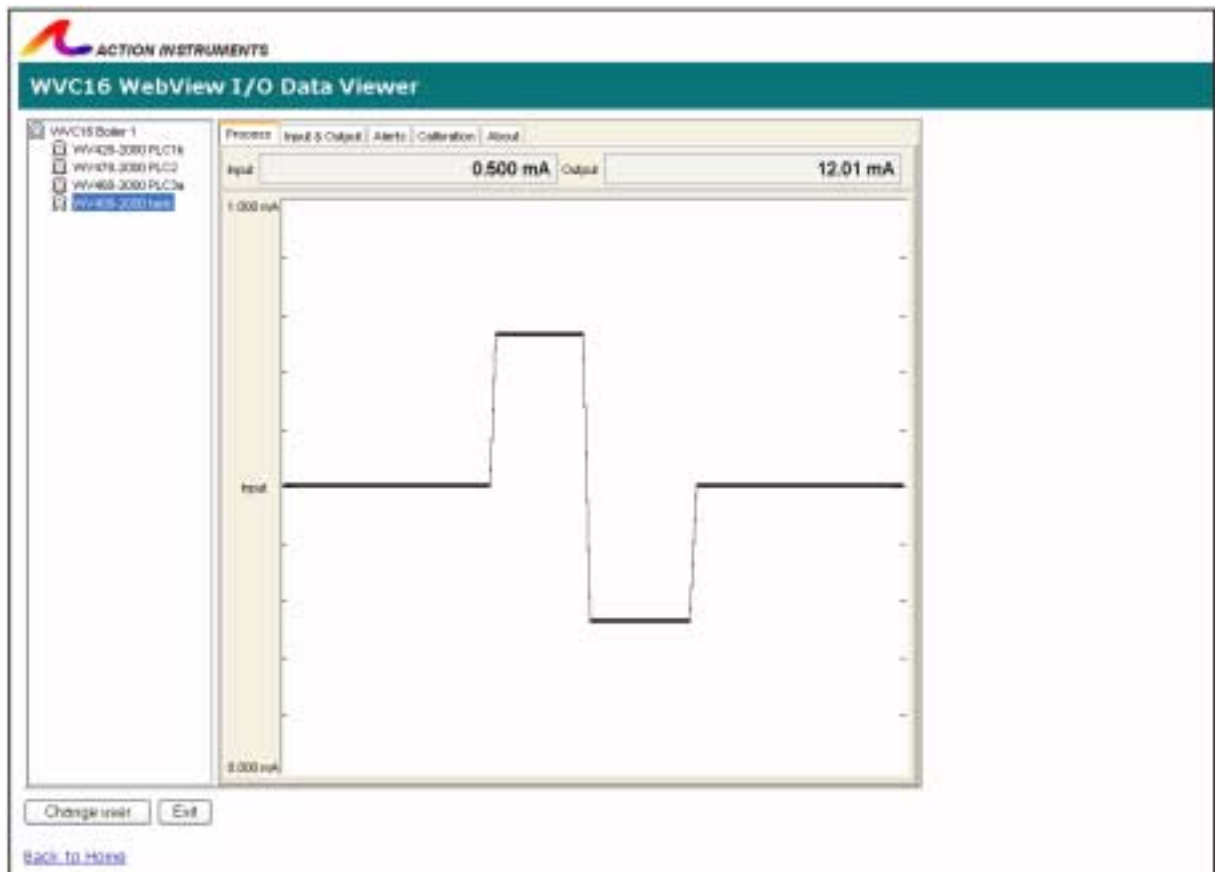*Figure 2: Data Viewer Home Page*

Figure 3: Module Page

Specifications

Processor:

AM186ESLV, 25MHz

Data Logging Capacity:

>24k samples

Host Interface:

Type: Ethernet, 10Base-T

Connector: RJ45

Cable: Cat 5 recommended

Utility Interface:

Type: RS-232

Baud Rate: 9600

Data Bits: 8

Stop Bits: 1

Parity: None

Flow Control: None

Module Interface:

Type: Infrared

32 Modules max

User Interface:

Type: Web Browser, requires Java 2 Plug-in; Internet Explorer 5.01 (or later) or Netscape Navigator 4.7 (or later)

Isolation:

1500Vrms between 10Base-T port and all other external connections.

Battery:

Type: 3V Lithium, non-rechargeable cr2032 or BR2032. Life expectancy is 16 months typical in use (battery enable switch ON). Shelf life 10 yrs.

Power:

9-30VDC; 1.2W max

Size:

DIN rail case – refer to Dimensions drawing

Operating Temperature:

0°C to +60°C (32°F to 140°F)

Storage Temperature:

-25°C to +85°C (-13°F to 185°F)

Operating Humidity:

15% to 95% RHNC @ 45°C

Storage Humidity:

90% RHNC @ 60°C for 24 hours

Agency Approvals (EMC & Safety):

UL recognized per standard UL508 (File No.E99775)

CE Conformance per EMC directive 89/336/EEC and Low Voltage 73/23/EEC (Input < 75VDC, only).

RoHS Compliant

Note that detailed installation instructions are available on our website.
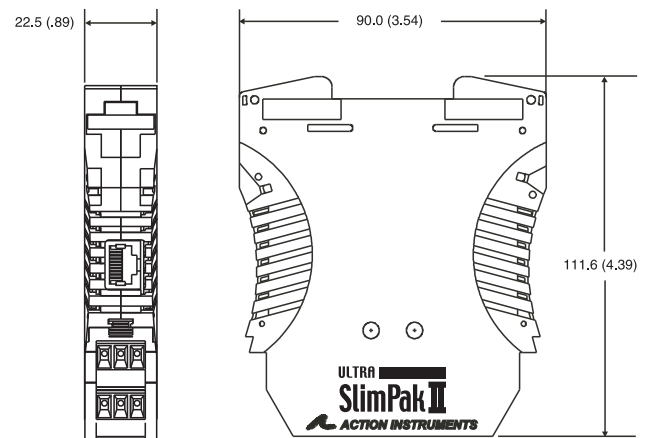
Ordering Information

Specify:

1. Model:

WVC16

2. Accessories:

C650-0000 - Utility CD and Serial Interface Cable (one C650-0000 accessory kit is necessary per installation, in order to set the IP address on the WVC16's).

Dimensions

Dimensions are in millimeters (inches)

22.5 (.89)   90.0 (3.54)   111.6 (4.39)

ULTRA SlimPak II
ACTION INSTRUMENTS

Factory Assistance

For additional information on calibration, operation and installation contact our Technical Services Group:

703-724-7314

US.Support@schneider-electric.com

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