








# In2Networks Security ICM v1 Module Application Guide

## Description

This module allows for control of an In2Networks Honeywell Vista Security ICM over TCP/IP from any Ethernet enabled, 2-Series Crestron processor. In2Networks builds an Ethernet based module, or ICM (internet connection module) that connects to the Vista keypad bus. The ICM will support the Vista 10/15/20/128 and 250 panels. Our module in turn communicates via IP with the In2networks box using a proprietary protocol that In2 developed for their embedded processor. You must purchase the ICM from Honeywell separately in order to make this module functional. The module will not communicate directly with the Honeywell Vista family.

## Supported Processors

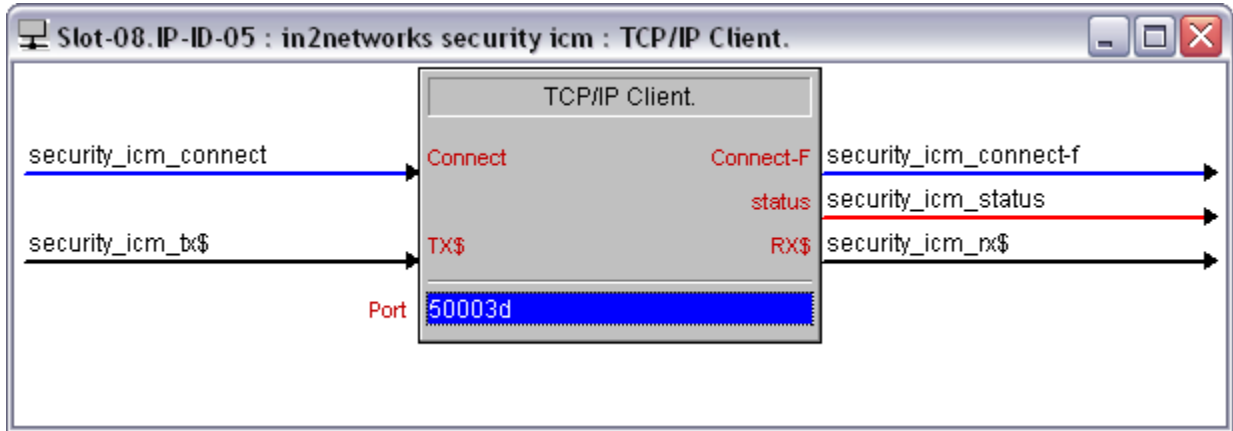
Any 2-series processor with an Ethernet card is supported.

Compatibility			Processor Requirements	
 2-Series Compatible	 NOT CNMSX Compatible	 System Builder Compatible	 Ethernet REQUIRED	 Compact Flash NOT NEEDED

## Ethernet Configuration Information

To control the In2Networks Security ICM over TCP, insert a TCP/IP client into your program. Configure the client as shown below, making sure you enter the IP address of the In2Networks Security ICM in the "Use IP Address" field. The IP ID will vary depending on where it is inserted into the program, or the IP ID numbering scheme of the system.

Declare the TCP/IP client symbol as shown, making sure the port is set to 50003d.

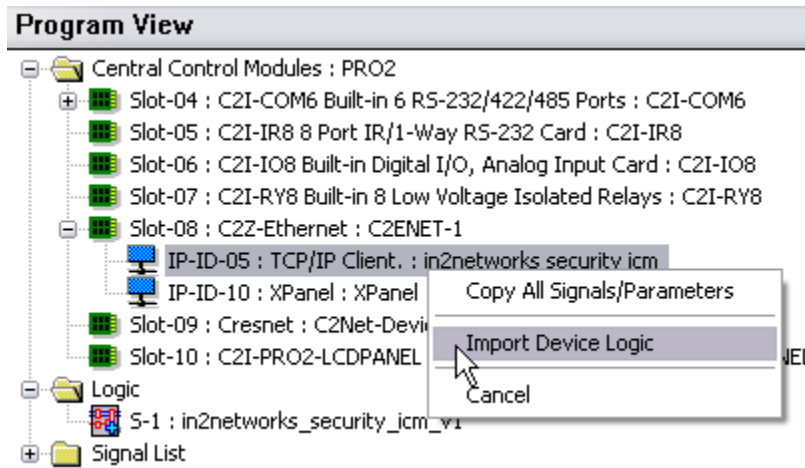


## Module Application

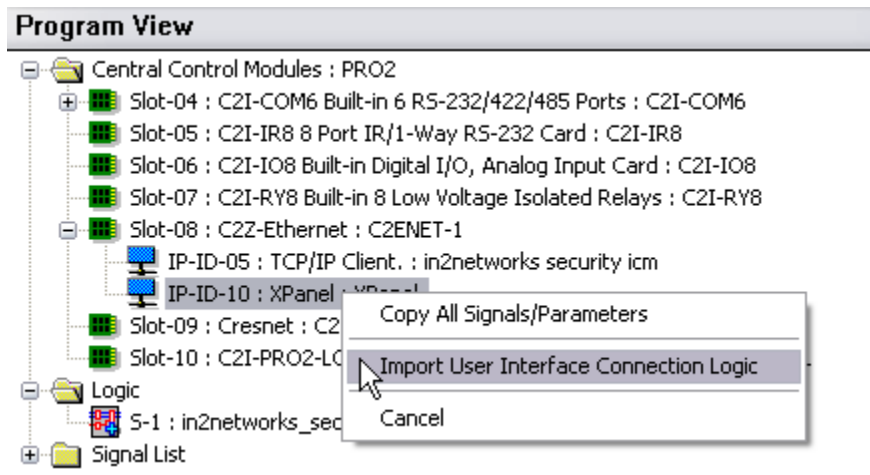
Be sure to follow all instructions provided by In2Networks to properly configure the Security ICM. Upon program startup, the Security ICM module will auto discover the node id of the Security ICM and set the module to only listen to that node.

## Virtual Connection Logic

This module is built utilizing virtual connection logic that will allow you to right-click and drag the module symbol to a TCP/IP client symbol, select "Import Device Logic" to auto-connect the two symbols. You will be prompted to add an optional signal prefix to the auto-connected signals. SIMPL will add an underscore character at the end of the prefix you enter automatically, so a space or underscore does not need to be entered in this dialog. Due to Crestron's implementation of this feature, the programmer will still need to manually enter the port number (50003d) on the TCP/IP client symbol.



Also utilized is connection logic enabling you to right-click and drag the module symbol to a touchpanel to have the two symbols auto-connect. Right-click and drag the module symbol to a touchpanel and select "Import User Interface Logic" from the drop-down list. You will be prompted for starting join offsets and a signal prefix. Using values of 1 for all of the offsets will connect the joins to match the demo touchpanel files included in the distribution package. You may change this offset to suit the needs of your project.



# Signal And Parameter Descriptions

Bracketed signals such as "[signal\_name]" are optional signals

## **DIGITAL INPUTS**

tcp-ip_connected .....	Route from the connect-f digital output of the TCP/IP client symbol. This is latched high when the client is successfully connected.
start_communication.....	Pulse to initiate the TCP/IP connection to the device.
stop_communication .....	Pulse to terminate the TCP/IP connection to the device.
[refresh] .....	Pulse to tell the ICM to update all system feedback. This does not refresh individual zone status. The unit will take up to 20 seconds or so to send all data.
[get_all_zone_status].....	Pulse to tell the ICM to report the status of each zone. This will take up to 45 seconds or so to send all data.
[keypad_0] – [keypad_pound] .....	Pulse to send keypad commands.
[keypad_f1] – [keypad_f4] .....	Pulse to send keypad commands.
[keypad_star_and_1]].....	Pulse to send keypad commands. Simulates pressing star and 1 at the same time.
[keypad_star_and_pound] .....	Pulse to send keypad commands. Simulates pressing star and pound at the same time.
[keypad_pound_and_3] .....	Pulse to send keypad commands. Simulates pressing pound and 3 at the same time.
[keypad_1_and_3] .....	Pulse to send keypad commands. Simulates pressing 1 and 3 at the same time.

## **ANALOG INPUTS**

tcp-ip_status.....	Route from the status output of the tcp/ip client symbol.
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## **SERIAL INPUTS**

tcp-ip_rx\$ .....	Route from the RX\$ output of the tcp/ip client symbol.
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## **DIGITAL OUTPUTS**

tcp-ip_connect .....	Route to the Connect input of the tcp/ip client symbol. Latched high when the module is requesting to be connected to the device.
[communication_enabled] .....	Latched high when the module is requesting to be connected to the device and the tcp/ip client symbol is reporting that the connection is made.
[disarmed_fb] .....	Latched high when device is reporting that system is disarmed.
[armed_stay_fb] .....	Latched high when device is reporting that system is in armed stay mode. Armed stay usually arms only perimeter/non-interior sensors.
[armed_away_fb] .....	Latched high when device is reporting that system is in armed away mode. Armed away usually arms all sensors.
[system_not_ready_fb] .....	Latched high when device is reporting that system is not ready to arm. The system is not ready when one or more non-bypassed sensors is reporting that it is not ready.
[system_ready_fb] .....	Latched high when device is reporting that the system is ready to arm.
[alarm_event_cleared_fb] .....	Latched high when device is reporting that an alarm event has occurred and been cleared. This will go low after the system has been armed and disarmed once after the alarm event has been cleared.
[alarm_event_fb] .....	Latched high when device is reporting that an alarm event has occurred. This usually happens when the system is armed and one or more zones open, or show a trouble status.
[zoneX_closed_fb] .....	Latched high when device is reporting that zoneX is closed and ready for arming. (X is currently = 1-32)
[zoneX_open_fb] .....	Latched high when device is reporting that zoneX is closed and ready for arming. (X is currently = 1-32)

## **ANALOG OUTPUTS**

This module not utilize any analog outputs.

## **SERIAL OUTPUTS**

tcp-ip_tx\$. .....	Route to the TX\$ input of the tcp/ip client symbol.
[display\$] .....	One-line status updates from the device. Emulates what would appear on the original device keypad/controller.

## **PARAMETERS**

device_type .....	Tells the ICM which type of security system to look for at startup. Currently, In2Networks supports the Honeywell Vista.
tcp-ip_port .....	This parameter is here for SystemBuilder support. It has only one allowable value, 50003d.

## Support

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This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email [support@controlworks.com](mailto:support@controlworks.com) or call us at 440-449-1100. ControlWorks normal office hours are 9 AM to 5 PM Eastern, Monday through Friday, excluding holidays.

Before calling for support, please ensure that you have loaded and tested operation using the included demonstration program and touchpanel(s) to ensure that you understand the correct operation of the module. It may be difficult for ControlWorks to provide support until the demonstration program is loaded.

Updates, when available, are automatically distributed via Email notification to the address entered when the module was purchased. In addition, updates may be obtained using your username and password at <http://www.thecontrolworks.com/customerlogin.aspx>.

## Distribution Package Contents

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The distribution package for this module should include:

in2networks_security_icm_v1.umc .....	Crestron User Module to control the Security ICM
in2networks_security_icm_engine_v1.usp .....	SIMPL+ file used within the Security ICM module
in2networks_security_icm_engine_v1.ush .....	SIMPL+ header file
in2networks_security_icm_demo_xpanel_v1.vtp .....	Demo XPANEL touchpanel file
in2networks_security_icm_v1.smw .....	Demo program for PRO2 processor
In2Networks_Security_ICM_help_v1.pdf .....	Help file for Security ICM module

## Revision History

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v1 gary@controlworks.com 2009.06.11

Initial release

## Development Environment

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Version 1 of this module was developed on the following hardware and software. Different versions of hardware or software may or may not operate properly. If you have questions, please contact us.

<b>Hardware</b>	<b>Firmware Version</b>
Crestron PRO2 Processor	4.001.1012
<b>Software</b>	<b>Software Version</b>
Crestron SIMPL Windows	2.11.18.00
Crestron Vision Tools Pro-e	3.9.30
Crestron Database	20.04.008.00
Device Database	20.09.005.00

# ControlWorks Consulting, LLC Software License Agreement

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**Definitions:** *ControlWorks*, *We*, and *Us* refer to ControlWorks Consulting, LLC, with headquarters located at 701 Beta Dr. #22 Cleveland, OH 44143. *You* and *Dealer* refer to the entity purchasing the module. *Client* and *End User* refer to the person or entity for whom the Crestron hardware is being installed and/or will utilize the installed system. *System* refers to all components described herein as well as other components, services, or utilities required to achieve the functionality described herein. *Module* refers to files required to implement the functionality provided by the module and may include source files with extensions such as UMC, USP, SMW and VTP. *Demo Program* refers to a group of files used to demonstrate the capabilities of the Module, for example a SIMPL Windows program and VisionTools Touchpanel file(s) illustrating the use of the Module but not including the Module. *Software* refers to the Module and the Demo Program.

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## **Provision of Support**

We provide limited levels of technical support only for the most recent version of the Module as determined by Us. We do not provide support for previous version of the module, modifications to the module not made by Us, to persons who have not purchased the module from Us. In addition, we may decline to provide support if the Demo Program has not been utilized. We may withdraw a module from sale and discontinue providing support at any time and for any reason, including, for example, if the equipment for which the Module is written is discontinued or substantially modified. The remainder of your rights and obligations pursuant to this license will not be affected should ControlWorks discontinue support for a module.

## **Modification of Software**

You may not decrypt (if encrypted), reverse engineer, modify, translate, disassemble, or de-compile the Module in whole or part. You may modify the Demo Program. In no event will ControlWorks Consulting, LLC be liable for direct, indirect, incidental or consequential damages resulting from You modifying the Software in any manner.

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