

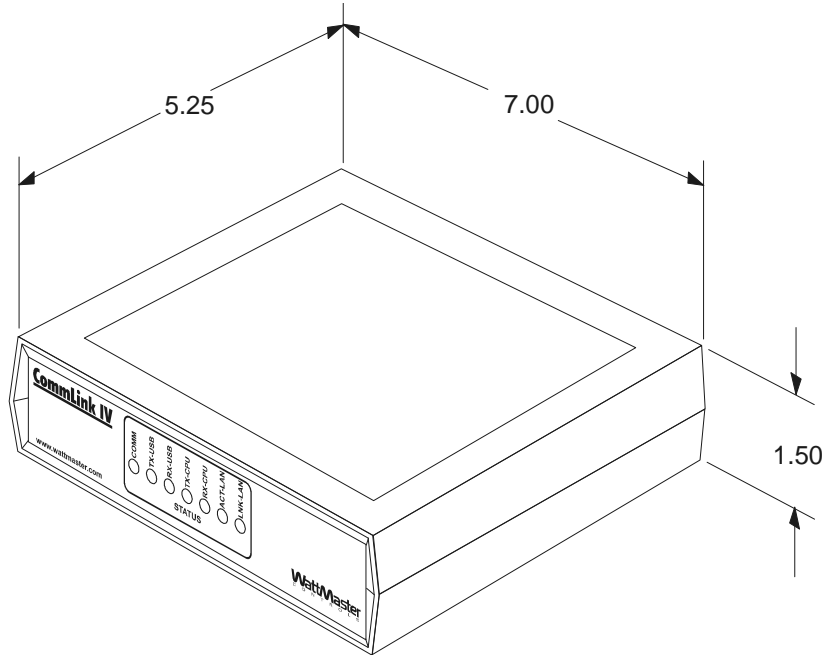
Description

The OE361-12 CommLink IV Communications Interface allows computer access into the Orion controls system and also provides communications across multiple local communications loops on the control system.

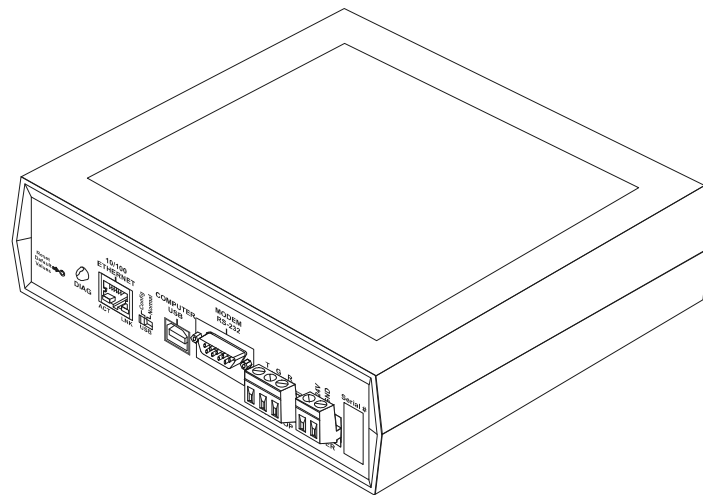
The CommLink IV comes packaged in an attractive beige colored plastic enclosure. The CommLink IV is powered by a small plug-in transformer that is included. Locally, an optional on-site personal computer with Prism software installed may be connected to the CommLink IV to provide direct access to system control parameters. A USB cable (6 ft. long) is provided with the CommLink IV for connection to your computer.

Remote telephone access to the control system can be obtained by purchasing the optional OE419-06 Remote Link II modem. With the optional Remote Link II modem installed, the control system can be accessed remotely by using another Remote Link II modem (purchased separately) connected to a personal computer with Prism software installed at the remote location. With the Remote Link installed at the job site, the CommLink IV can be configured to call a pager or cell phone number if an alarm condition occurs.

An optional OE415-02 IP Module Kit is also available that provides an Ethernet connection to the controls system from any computer connected to your building's LAN. It can also be configured to allow access to the control system from the Internet if your Ethernet firewall is configured for this option.



FRONT VIEW



REAR VIEW

Mounting

If an on-site computer is to be used for direct connection and monitoring of the system, the CommLink IV should be located near the computer terminal to monitor the system. If no on-site computer is to be used and/or you are installing the Remote Link II option, locate the CommLink IV near the phone line jack for ease of connection.

Technical Data		OE361-12 CommLink IV Communication Interface	
Power	24 Volt AC	*Remote Link II Conn.	RS-232 Serial Port (9 pin)
Plug-in Transformer	120V to 24VAC (Included)	**Ethernet Conn.	RJ-45 Ethernet Port
Power Consumption	14 VA Maximum	Network Loop	RS-485 – 19,200 Baud
Operating Temperature	10°F to 140°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Cabling Included	(1) 6 Ft. Long USB Cable
Computer Conn.	USB Version 1.1 or 2.0	Local Loop	RS-485 - 9600 Baud
Three Year Warranty		WattMaster reserves the right to change specifications without notice	
* This Port Is Only Used With The Optional OE419-06 Remote Link II. ** This Port Is Only Used With The Optional OE415-02 IP Module Kit.			

Description

The OE366 USB-Link allows computer access into the Orion controls system and also provides communications across multiple local communications loops on the control system when a CommLink Communications Interface is installed on the system.

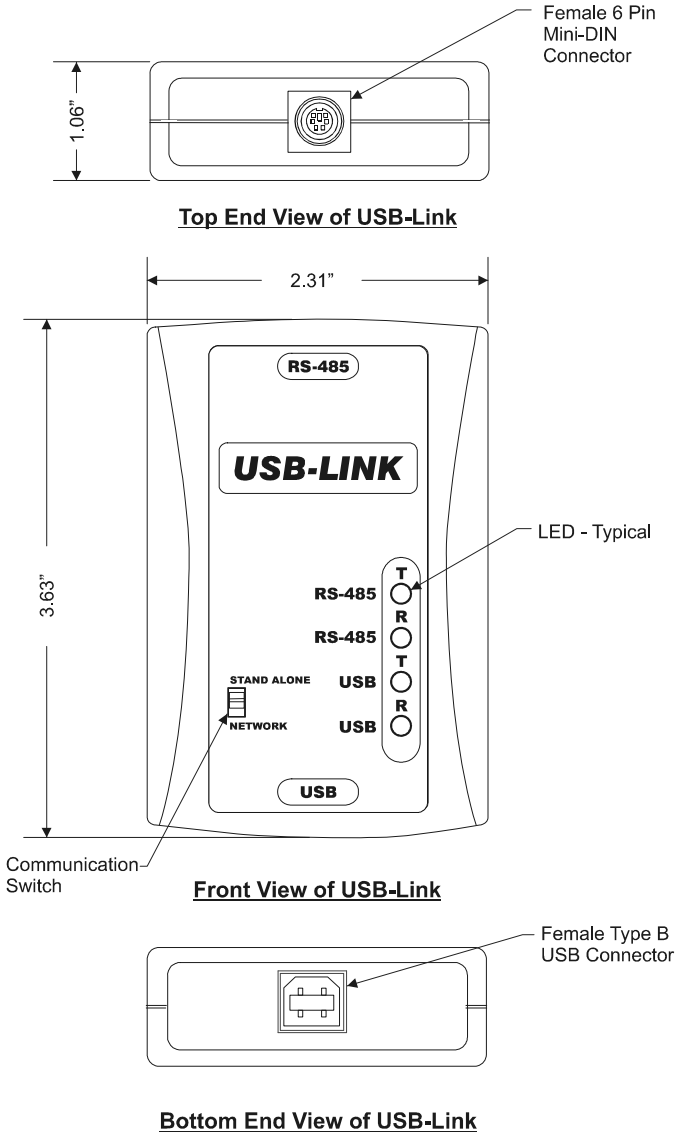
The USB-Link provides a direct link to enable the system operator to view the status and to configure and adjust the setpoints of any controller on the control system communications loop using the Prism II computer front end software.

The USB-Link is small in size and is powered by the USB port of the computer it is plugged into, making it completely portable and allowing connection to the system from any controller.

The USB-Link is supplied with a USB cable, a mini-DIN male communication cable, and two mini-DIN to terminal adapters. The communication cable allows the user to walk up to any controller that has a communication socket and plug in the USB-Link to gain access to the system. The adapters are used for boards that do not have a female mini-DIN plug connection.

To use the USB-Link, you will need a computer with an available USB 1.1 or 2.0 port with the included USB drivers installed. You will also need the Prism II computer front end software installed on the computer.

CAUTION: The USB-Link does not work with Prism I software. It only works with Prism II.



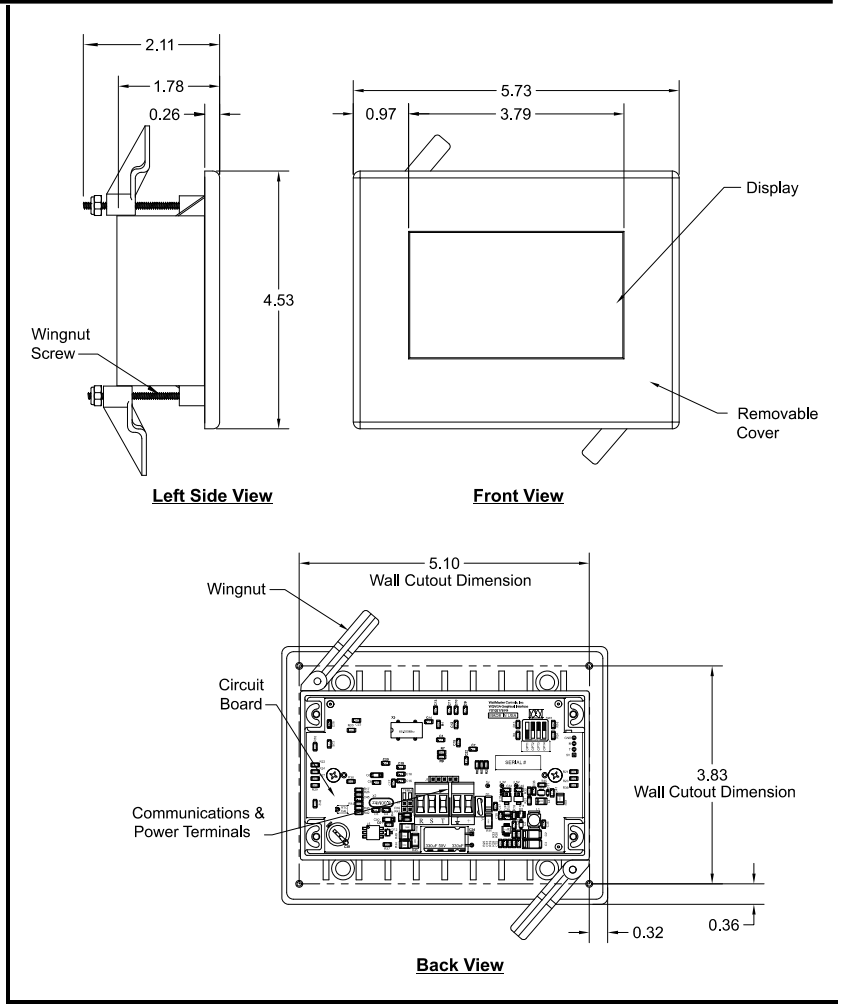
Technical Data		OE366 USB-Link	
Operating Temperature	10°F to 140°F	Cabling Included	(1) 6 Ft. Long USB Cable and (1) 7 Ft. Long Communications Cable
Operating Humidity	90% RH Non-Condensing	Communications	RS-485 - 9600 Baud
Computer Connection	USB Version 1.1 or 2.0	Adapters Included	PL1019054 and PL101905 Mini-DIN Plug Adapters
Three Year Warranty		WattMaster reserves the right to change specifications without notice	

Description

The OE392-06 System Manager TS provides a direct graphic-enhanced, menu-driven link to enable the system operator to view the status and to adjust the set-points of any controller on the Orion control system.

The System Manager TS is equipped with a 4.3" 480 x 272 WQVGA RGB TFT LCD Touch Screen Display able to display 16 million colors. The System Manager TS utilizes a graphical touch screen menu system with easy to understand menu trees and icons and non-cryptic plain English language messages. The graphic programming and status screens are very intuitive and provide the user with easy setup and operation without the need for specialized training. Protection from unauthorized users is provided by the System Manager's integral multi-level passcode authorization programming.

The System Manager TS is connected to the local communications loop of the Orion system via 18 AWG 2-conductor, twisted pair wire with shield wire connected to the T, SHLD & R communications terminals on the back of the System Manager TS. The communications wire used can be either our WattMaster #WR-LL-WG-18 communications wire or Belden #82760 wire or its equivalent. The System Manager TS also requires that 24 VAC (6 VA) power be supplied (by others) to its + and - wiring terminal located on the back of the System Manager TS.



Mounting

The System Manager TS is housed in a plastic enclosure designed for mounting in hollow drywall construction with the flush mount version (shown) or on a concrete, brick or other solid wall surface with the surface mount version (optional). The flush mount version has integral wing nut paddles that are tightened after installation to grip the drywall and hold the System Manager TS in place. The surface mount version is designed to be installed to a double duplex outlet box (by others). Both mounting styles of the System Manager feature an integral magnetically-secured face plate which can be easily removed for reset of the display when required. The System Manager TS should be mounted at approximately eye level to allow for ease of programming and reading of the display. The System Manager is typically mounted in the building manager's or superintendent's office or in an equipment room, but is also quite suitable for mounting in any location or with most decors.

Technical Data		OE392-06 System Manager TS	
Display	4.3" 480x272 WQVGA RGB TFT LCD Touch Screen Display w/ 16 million colors	Communication Connection	RS-485
Power Supply	24 VAC Single 60 Hz	Protocol	HSI Open Protocol Token Passing
Power Consumption	5 VA Maximum	Housing Material	Plastic
Operating Temp	14°F to 158°F	Communications	Isolated RS-485
Operating Humidity	Less than 90% RH Non-Condensing	User Interface Method	LCD Touch Screen
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

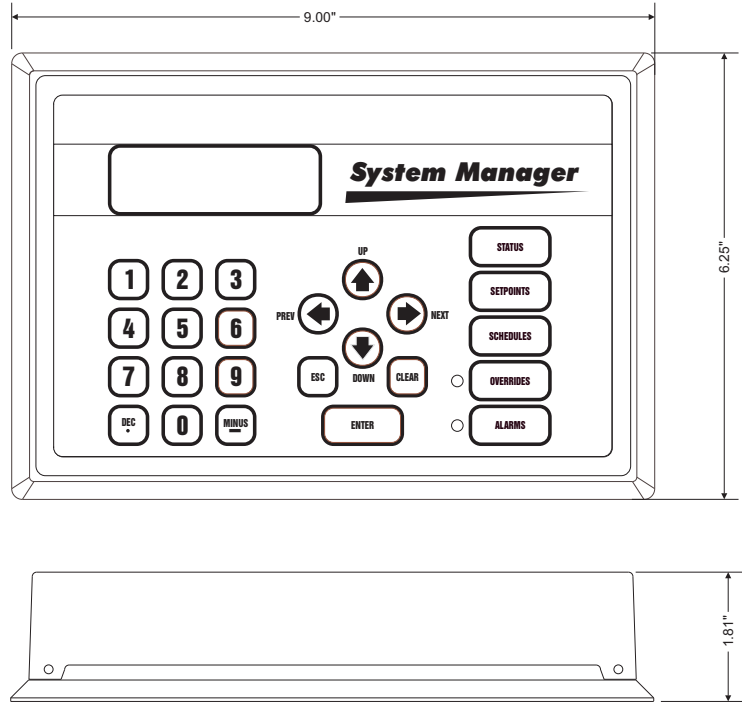
Description

The Modular System Manager (Orion Part No. OE392-09; AAON Part No. V11000) is a system interface that provides a direct link to enable the system operator to view the status, configure, and adjust the setpoints of the following controllers:

- VCM-X Controller
- VCB-X Controller

The OE392-09 System Manager is housed in a beige-colored plastic enclosure. The System Manager is equipped with a four line by 20 character backlighted display panel and a 24 key membrane keypad for data selection and entry. All keypad operations are simple and straight forward, utilizing non-cryptic plain English language messages. Menu-driven programming allows for easy setup and operation without the need for specialized training. The System Manager also has 2 integral LEDs for user notification of system alarm conditions and override initiations. Protection from unauthorized users is provided by the System Manager's integral multi-level passcode authorization programming.

The Modular System Manager is connected to the communications and power loop of the system via modular cables that simply plug into the System Manager board. This virtually eliminates wiring errors and makes installation fast and easy.



Mounting

The Modular System Manager is designed for wall mounting. Mounting holes are provided to attach the Modular System Manager to a standard handy box. It is recommended that the System Manager be mounted at approximately eye level to allow for ease of programming and reading of the display. The System Manager is typically mounted in the building manager or superintendent's office or in an equipment room. The attractive enclosure is quite suitable for mounting in any location or with most decors.

Technical Data		OE392-09 Modular System Manager	
Power	24 Volt AC/DC	Display	4 Line by 20 Character Backlighted LCD
Power Consumption	5 VA Maximum	Network Connection	RS-485
Operating Temp	10°F to 149°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Housing Material	Beige Plastic
Keypad	24 Key Membrane Type	Communications	RS-485 - 9600 Baud
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

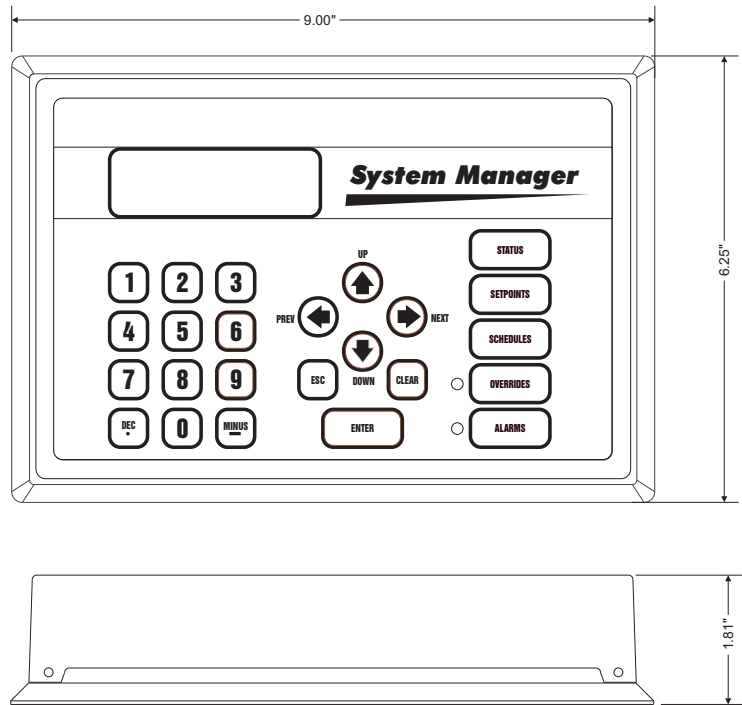
Description

The OE392-07 Modular System Manager is a system interface that provides a direct link to enable the system operator to view the status, configure, and adjust the setpoints of the following controllers:

- VAV/Zone SS1001 v2.13 & newer
- Polling Device SS1002 v1.18 & Newer
- VAV/Zone SS1005 v3.06 & newer
- VCM SS1016 v 1.62 & newer

If your controllers or codes are older than those listed above, you must use the OE391-05 Modular System Manager.

The OE392-07 System Manager is housed in a beige-colored plastic enclosure. The System Manager is equipped with a four line by 20 character backlighted display panel and a 24 key membrane keypad for data selection and entry. All keypad operations are simple and straight forward, utilizing non-cryptic plain English language messages. Menu-driven programming allows for easy setup and operation without the need for specialized training. The System Manager also has 2 integral LEDs for user notification of system alarm conditions and override initiations. Protection from unauthorized users is provided by the System Manager's integral multi-level passcode authorization programming.



The Modular System Manager is connected to the communications and power loop of the system via modular cables that simply plug into the System Manager board. This virtually eliminates wiring errors and makes installation fast and easy.

Mounting

The Modular System Manager is designed for wall mounting. Mounting holes are provided to attach the Modular System Manager to a standard handy box. It is recommended that the System Manager be mounted at approximately eye level to allow for ease of programming and reading of the display. The System Manager is typically mounted in the building manager or superintendent's office or in an equipment room. The attractive enclosure is quite suitable for mounting in any location or with most decors.

Technical Data		OE392-07 Modular System Manager	
Power	24 Volt AC/DC	Display	4 Line by 20 Character Backlighted LCD
Power Consumption	5 VA Maximum	Network Connection	RS-485
Operating Temp	10°F to 149°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Housing Material	Beige Plastic
Keypad	24 Key Membrane Type	Communications	RS-485 - 9600 Baud
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

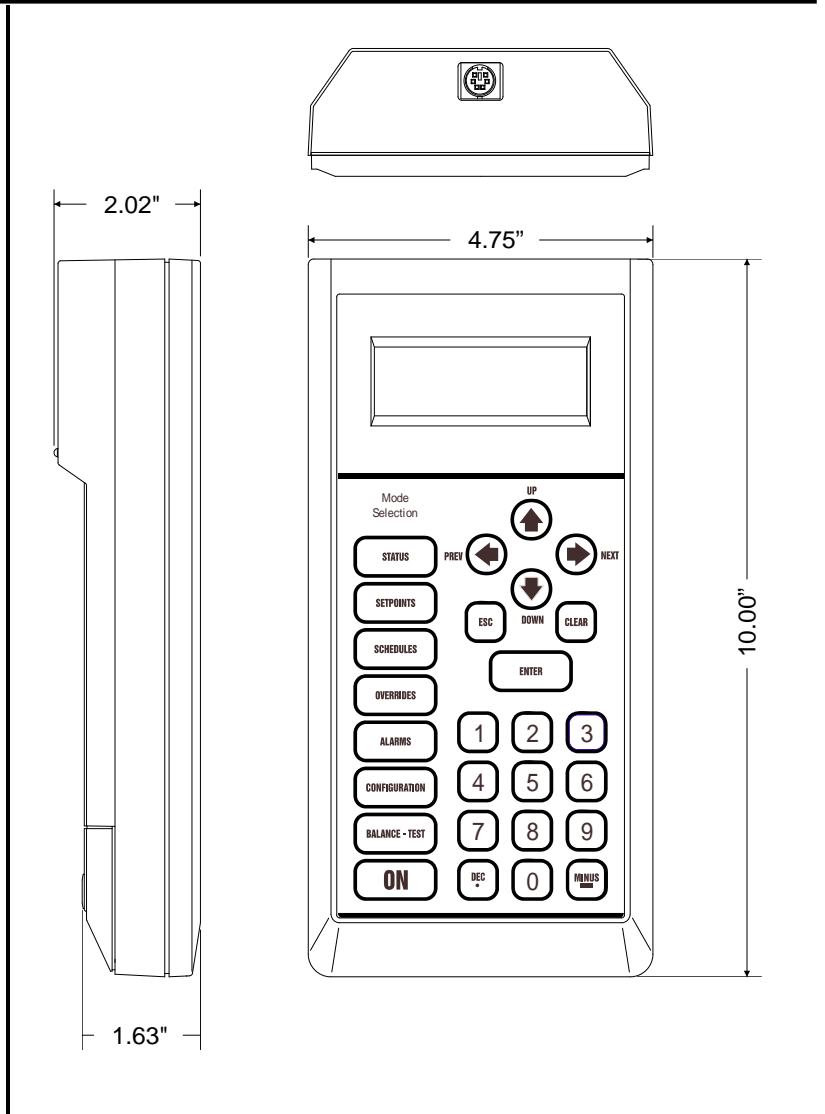
Description

The OE391-07 Modular Service Tool is a system interface that provides a direct link to enable the system operator to view the status, configure, and adjust the setpoints of the following Orion controllers:

- VAV/Zone SS1001 v2.13 & newer
- Polling Device SS1002 v1.18 & newer
- VAV/Zone SS1005 v3.06 & newer
- VCM SS1016 v 1.62 & newer

If your controllers or codes are older than those listed above, you must use the OE391-05 Modular Service Tool.

The OE391-07 Modular Service Tool is housed in a beige-colored plastic enclosure. The display area is covered with a clear plastic bezel for protection of the display screen. The Modular Service Tool has a four line by 20 character display panel with adjustable contrast control and a 27 key membrane keypad for data selection and entry. All keypad operations are simple and straight forward, utilizing non-cryptic plain English language messages. Menu-driven programming allows for easy setup and operation without the need for specialized training. The OE391-07 Modular Service Tool is supplied with (4) AA (1.5V) Volt alkaline batteries, a wall-mount DC power supply, and a communication cable terminated with an 8 pin DIN connector for connection to the Service Tool. The cable allows the user to setup and program any controller by simply plugging the quick connect terminal into the socket on the controller.



The Modular Service Tool is designed to be carried by the system installer or service technician. Its rugged plastic housing provides superior protection for the electronic components housed inside. The OE391-07 Modular Service Tool is a top quality service tool that will stand up to the demands of the typical job site environment for many years.

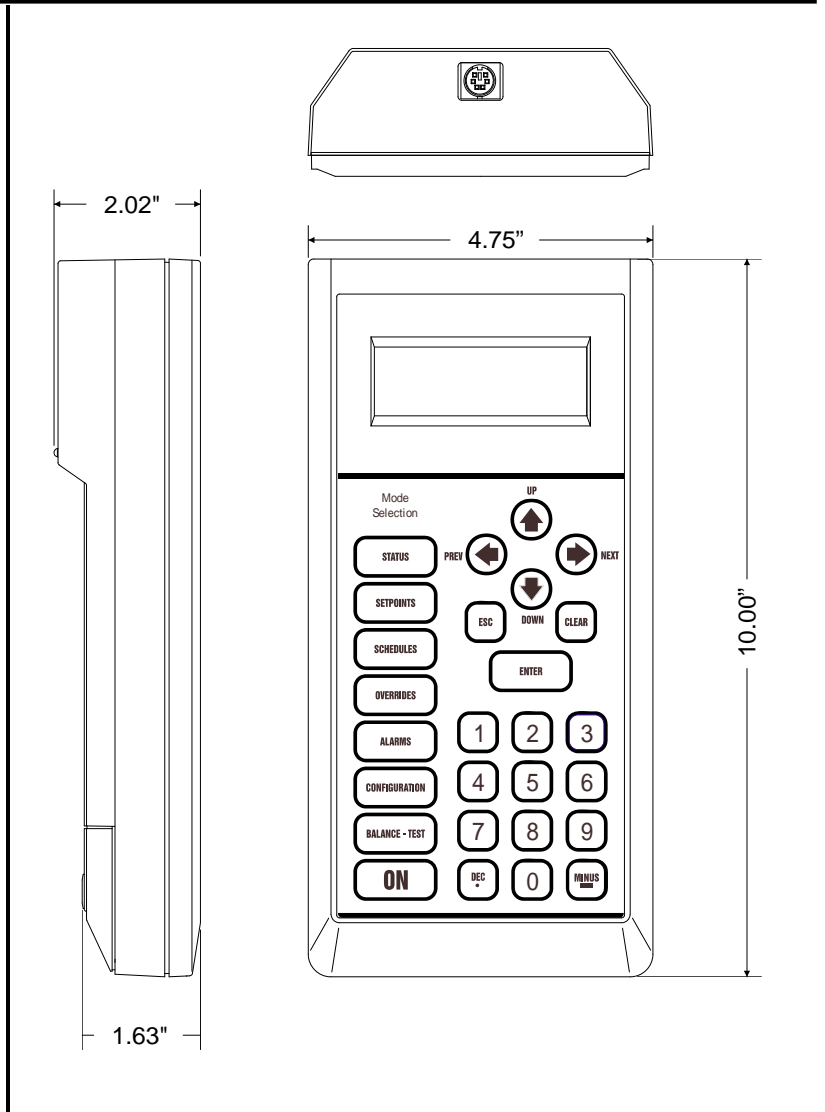
Technical Data		OE391-07 Modular Service Tool	
Power	(4) AA (1.5V) Batteries Supplied	Display	4 Line by 20 Character
Power Switch	Membrane Switch	Network Connection	RS-485
Operating Temp	10°F to 149°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Color	Beige
Keypad	27 Key Membrane Style	Communications	RS-485 9600 Baud
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

Description

The Modular Service Tool (Orion Part No. OE391-09; AAON Part No. V11010) is a system interface that provides a direct link to enable the system operator to view the status, configure, and adjust the setpoints of the following Orion controllers:

- VCM-X Controller
- VCB-X Controller

The OE391-09 Modular Service Tool is housed in a beige-colored plastic enclosure. The display area is covered with a clear plastic bezel for protection of the display screen. The Modular Service Tool has a four line by 20 character display panel with adjustable contrast control and a 27 key membrane keypad for data selection and entry. All keypad operations are simple and straight forward, utilizing non-cryptic plain English language messages. Menu-driven programming allows for easy setup and operation without the need for specialized training. The OE391-09 Modular Service Tool is supplied with (4) AA (1.5V) Volt alkaline batteries, a wall-mount DC power supply, and a communication cable terminated with an 8 pin DIN connector for connection to the Service Tool. The cable allows the user to setup and program any controller by simply plugging the quick connect terminal into the socket on the controller.



The Modular Service Tool is designed to be carried by the system installer or service technician. Its rugged plastic housing provides superior protection for the electronic components housed inside. The OE391-09 Modular Service Tool is a top quality service tool that will stand up to the demands of the typical job site environment for many years.

Technical Data		OE391-09 Modular Service Tool	
Power	(4) AA (1.5V) Batteries Supplied	Display	4 Line by 20 Character
Power Switch	Membrane Switch	Network Connection	RS-485
Operating Temp	10°F to 149°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Color	Beige
Keypad	27 Key Membrane Style	Communications	RS-485 9600 Baud
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

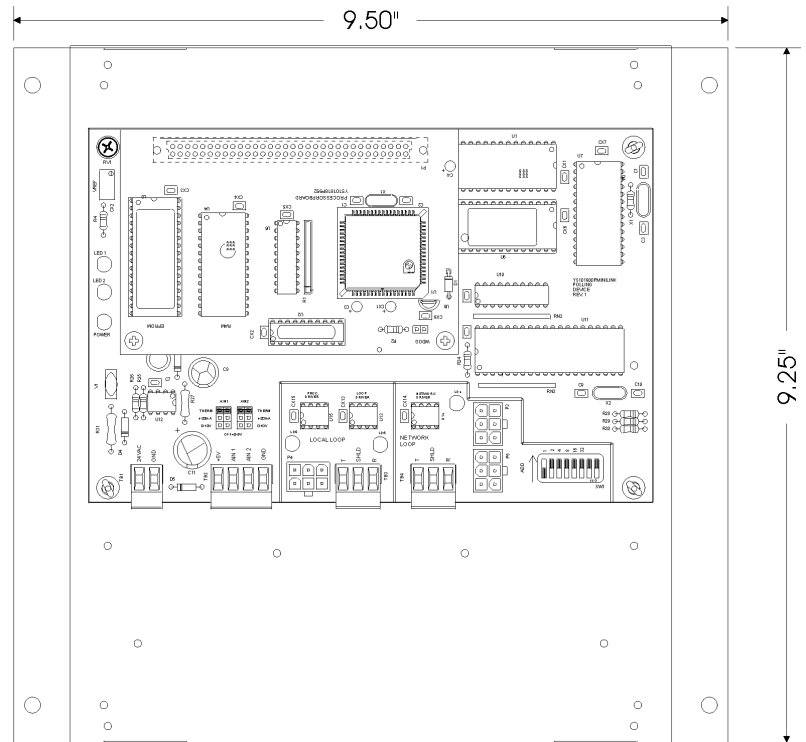
Description

The OE-364-22 MiniLink Polling Device is a network controller that is used to integrate multiple local communication loops into a network communications system. Network loop terminals of the MiniLink Polling Device are designed to be connected to the CommLink II and to other MiniLink Polling Devices on the network communications loop. Local loop terminals of the MiniLink Polling Device are designed to be connected to controllers installed on the local communications loop. The MiniLink Polling Device can be connected to the communication loops and power loop of the system controllers via modular cables that simply plug into the MiniLink Polling Device board. This virtually eliminates wiring errors and makes installation fast and easy.

The MiniLink Polling Device utilizes token passing communication architecture. The MiniLink Polling Device is designed to serve as the local communications loop master. This means that it is responsible for sending the token to all the controllers on the local communications loop. Network communications are of the RS-485 type operating at 19,200 baud. Local communications are also of the RS-485 type and operate at 9600 baud. The Mini-Link PD is required for zoning systems to facilitate voting of the zones to determine the HVAC units heating and cooling mode of operation. It also provides tenant-logging capabilities.

Mounting

The MiniLink Polling Device is factory mounted in a galvanized sheet metal enclosure. Mounting holes are provided in the enclosure for surface mounting.



MiniLink Polling Device Is Supplied Factory Mounted To Control Enclosure. Cover Shown Removed For Clarity

Technical Data		OE364-22 – MiniLink Polling Device	
Power	24 Volt AC	System Connection	Molex® Connectors & Terminals
Power Consumption	6VA Maximum	Network Connection	RS-485
Operating Temp	10°F to 149°F	Protocol	HSI Open Protocol Token Passing
Operating Humidity	90% RH Non-Condensing	Housing Material	22 Ga. Galvanized Steel
Communications	RS-485 - 9600 Baud, Local	Communications	RS-485 - 19200 Baud, Network
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

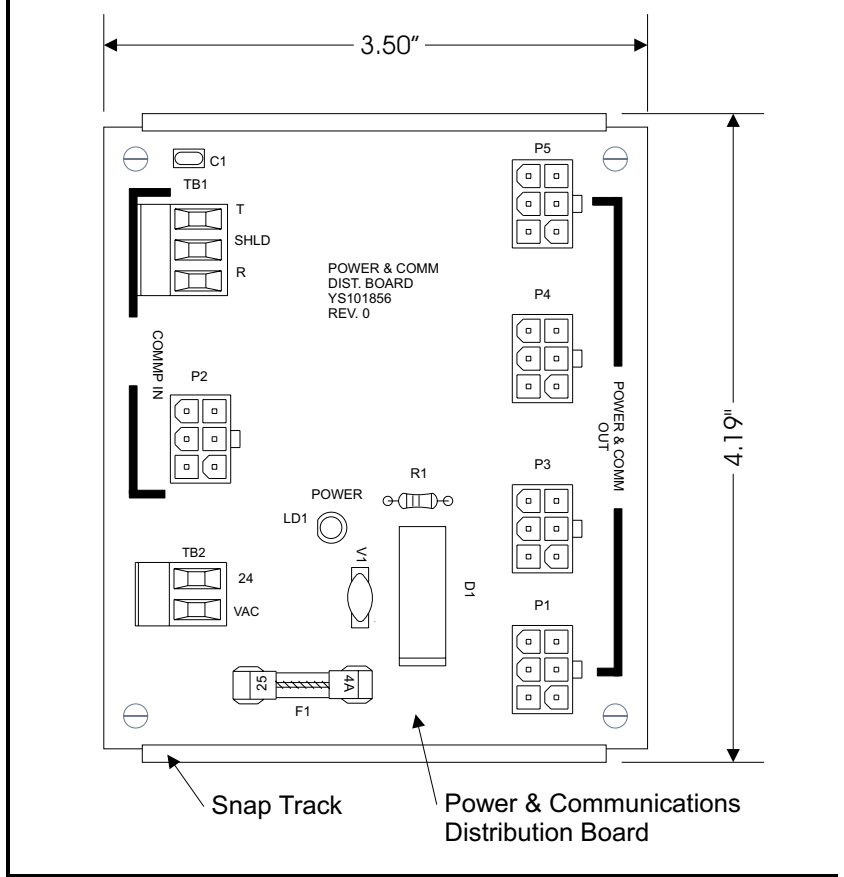
Description

The OE365-01 – Power & Communications Distribution Board is used as a distribution point for power and communications wiring for VAV/Zone Controllers and other Orion System peripheral devices. The Power & Communications Distribution board is designed to allow for the connection of up to a maximum of 6 VAV/Zone controllers per branch output connector. The 4 branch outputs are each provided with Molex connector female sockets on the board. Terminal Blocks are provided for connection of Power & communications wiring to the board. The board provides for total power distribution of up to 80VA at 24VDC. This allows up to 20 VAV/Zone Controllers to be connected to the board. The 24VDC power circuit is fused on the board to protect the branch circuits. The RS-485 communications wiring is also routed through the Molex modular connectors, providing communications to all controllers on the loop served by the Power & Communications Distribution Board.

Connection to the VAV/Zone controller boards and other devices on the branches is achieved by utilizing 5 conductor w/ drain wire, plenum rated prefabricated modular cables available from WattMaster. The main cables are terminated on each end with male Molex connectors. This allows for plug in connection to all boards on the branch circuits thereby virtually eliminating costly wiring errors. The modular cables are available in various lengths to suit almost any wiring requirement. Male to female extension cables are available to eliminate any need for splicing cables.

Mounting

The OE365-01 Power & Communications Distribution Board is supplied mounted on a plastic Snap Track channel. The Snap Track channel has two mounting holes, which are used to field mount the board with the provided screws.

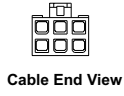
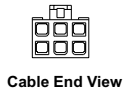
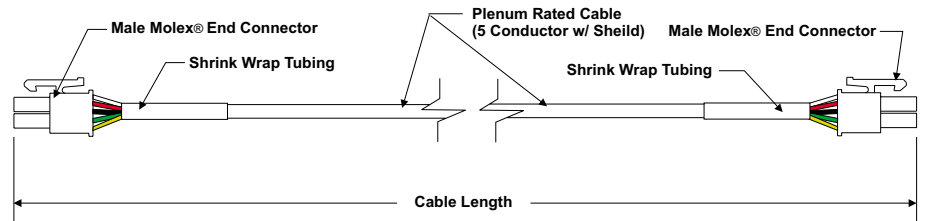


Technical Data		OE365-01 – Power & Communication Distribution Board	
Input Power	24 VAC @ 100VA	Power Fusing	4 Amp Slow Blow Fuse
Output Power	24 VDC @ 80VA	Operating Humidity	90% RH Non-Condensing
Operating Temp	10°F to 149°F	Weight	8 oz
Power and Communications connections	Molex Connectors	Mounting Provisions	Supplied with Snap Track Base
Qty of Branch Circuits Provided For VAV/Zone Controller and Other Peripheral Boards	4		
Three Year Warranty		WattMaster reserves the right to change specifications without notice	

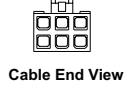
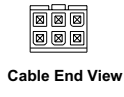
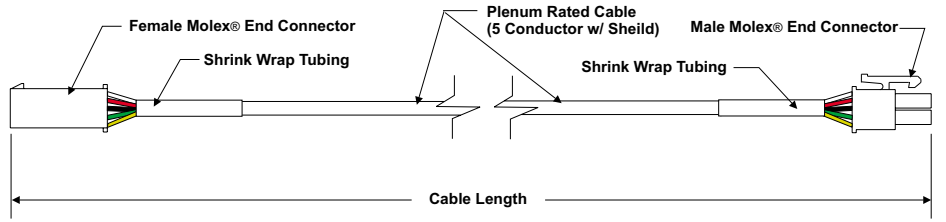
Description

The PCC & PCCE Power & Comm Cables are used to connect power and communications wiring from the Power & Communications Distribution Board to VAV/Zone Controllers and other Orion System peripheral devices. They are also used to connect between VAV/Zone Controllers on each loop of the system. The Power & Comm Cables consist of 5 conductor (16AWG) with shield wire, plenum rated cable and are terminated at both ends with Molex® plug-in connectors.

The PCC Power & Comm Cables are available in 25, 40, 80 and 120 feet lengths. These lengths should satisfy most job requirements. For length requirements outside of these ranges the PCCE Power & Comm Extension Cables are available in 10 and 20 feet lengths to eliminate any need for splicing cables. The Molex® connector plug-in design of the cables eliminates costly wiring errors and makes system installation easy. The cable components are UL approved.



PCC Power & Comm Cable Assembly
Available in 25, 40, 80 or 120 Feet Lengths



PCCE Power & Comm Extension Cable
Available in 10 or 20 Feet Lengths

Technical Data		PCC & PCCE – Power & Comm Cables	
Model PCC Cable Available Lengths and Part Numbers	PCC-25 (25 Ft.) PCC-40 (40 Ft.) PCC-80 (80 Ft.) PCC-120 (120 Ft.)	Model PCCE Cable Available Lengths and Part Numbers	PCC-10 (10 Ft.) PCC-20 (20 Ft.)
Cable Type	Plenum Rated CMP/CL2P	Current Rating of Connectors	8 Amps
Wire Size	16 Gauge Stranded 5 Conductor With Shield	UL Listing Number	UL E118871
Model PCC Terminations	(2) Molex® Mini-Fit Jr. Plug Connectors	Cable Color	Off White
Model PCCE Terminations	(1) Molex® Mini-Fit Jr. Receptacle Connector and (1) Molex® Mini-Fit Jr. Plug Connector	Wire Colors	White, Red, Black, Clear, Green
Three Year Warranty		WattMaster reserves the right to change specifications without notice	

Description

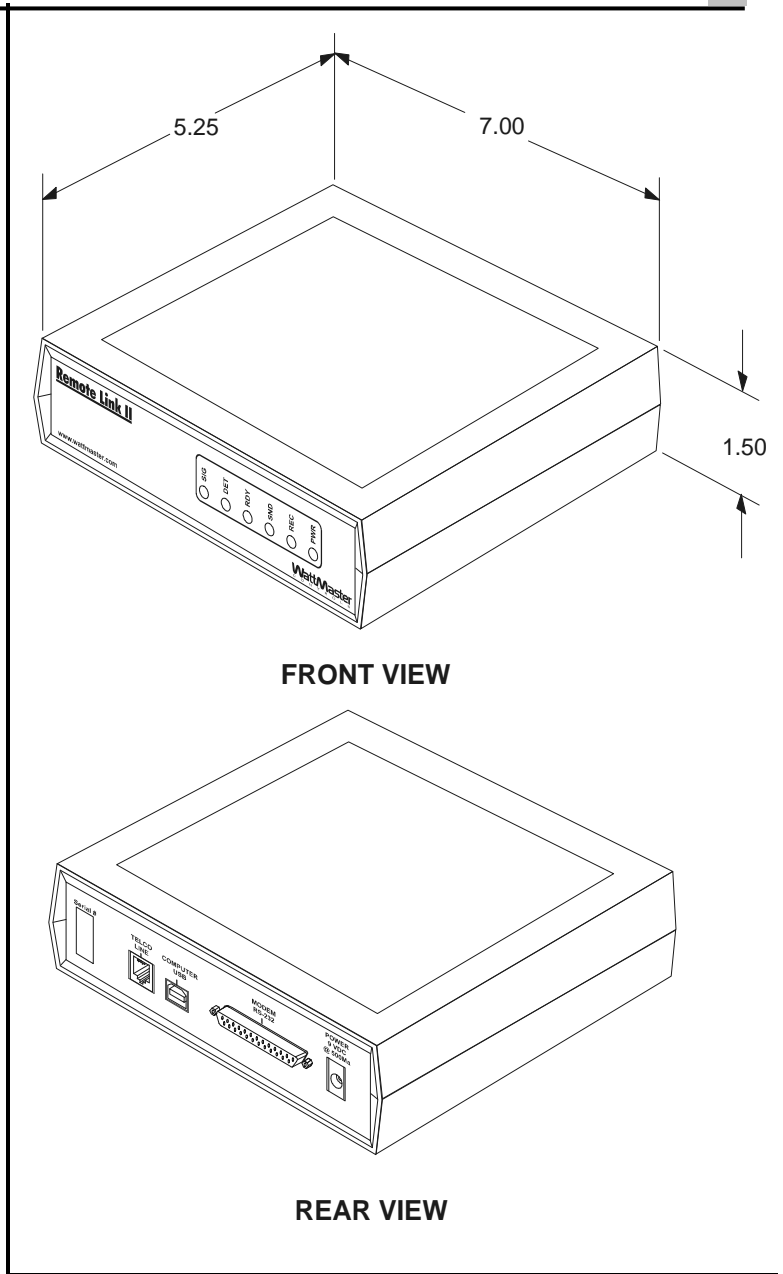
The OE419-06 Remote Link II is essentially a 14,400 baud modem that connects to the CommLink IV via a serial cable. When it is used as a modem (at the remote computer location) it connects to the remote computer via a USB cable. The Remote Link II is used to provide for remote dial-up communications with the CommLink II or CommLink IV communication interfaces.

The Remote Link II connects to the CommLink II or IV communications interface at the control system location. A telephone line connects the Remote Link II to the local phone service. By dialing the telephone number at the job site that the Remote Link II is connected to (using another Remote Link II modem from a remote location), the control system can be monitored and controlled using the Prism computer front end software package.

Mounting

The Remote Link II should be mounted close to a serviceable telephone outlet. The CommLink II or CommLink IV communications interface connects to the Remote Link II with the supplied 6 ft. long serial cable.

It is recommended that a second Remote Link II be used as the dial out modem at the remote computer location. WattMaster will not support any other internal or external modems by other manufacturers. A 6 ft. long USB cable is supplied with the Remote Link II to connect to the remote computer USB port when the Remote Link II is used at the remote computer location. If an on-site computer at the job location is required, it should be connected to the CommLink II or IV at or near the location where the Remote Link II is located, for ease of connection. If you need to use a longer serial or USB cable, you will need to purchase these from an electronics supply store. Do not use any USB or serial cables longer than 25 ft.



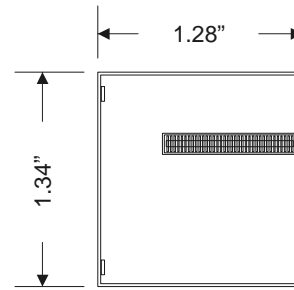
Technical Data		OE419-06 Remote Link II	
Power	9 VDC	Computer Connection	6 ft. USB Cable For Use With USB Version 1.1 or 2.0 Ports
Plug-in Transformer	120 VAC to 9 VDC (Included)	For Remote Modem Use	
Power Consumption	500mA Maximum	Phone Connection	RJ-11 Female
Operating Temperature	10°F to 140°F	Line Speed	14,400 bps
Operating Humidity	90% RH Non-Condensing	Data Compression	V.42bis/MNP 5
CommLink Connection	6 ft. - Serial Cable	Error Correction	V.42/MNP 2-4
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

Description

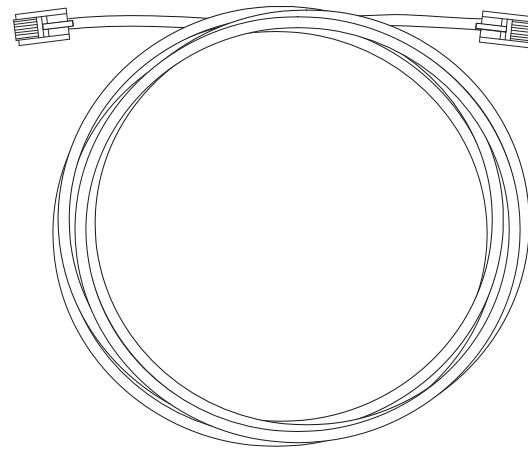
The OE415-02 IP Module Kit (when installed and configured in the CommLink IV communication interface) provides TCP/IP Internet and/or intranet connection for Ethernet networked computer systems allowing them to communicate with your control system. The OE415-02 IP Module Kit consists of the IP Module and a 10 ft. long CAT5 Ethernet crossover cable.

The IP Module plugs into a mating 40 pin (2 x 20) connector located on the CommLink IV circuit board. Installation is easily accomplished by removing the CommLink IV case cover screws, removing the case cover to access the circuit board, and then plugging the IP Module into its mating socket connector. Correct alignment is made easy because of the (4) slot alignment tabs located around the perimeter of the processor base. It is not possible to incorrectly align the IP Module to the socket connector because of this feature.

The TCP/IP connection provided by the IP Module installed in the CommLink IV is a TCP connection on a single port number and is static in nature. Firewall and proxy servers can easily be configured to allow traffic to and from the CommLink IV when the IP Module is installed. The nature of the data is raw in form and comprised of packets native to Prism software. The IP Module will respond to ICMP traffic (PING) for verification of proper configuration. Prism software is required in order to read and send data to the IP Module and through the CommLink IV to the control system. The IP Module connects to the host Ethernet system by means of the supplied 10 ft. long CAT 5 Ethernet crossover cable which plugs into the 10/100 Base-T, RJ-45 jack on the back of the CommLink IV and into a Ethernet router or Ethernet modem on your building's LAN. Setup of the CommLink IV with the IP Module requires a knowledgeable IT person familiar with configuring network adapters and TCP/IP systems. Prism software must be installed on the local LAN computer(s) and/or remote Internet computers that will be used to program and monitor the control system.



IP Module



CAT5 Ethernet Cable

The TCP/IP connection provided by the IP Module installed in the CommLink IV is a TCP connection on a single port number and is static in nature. Firewall and proxy servers can easily be configured to allow traffic to and from the CommLink IV when the IP Module is installed. The nature of the data is raw in form and comprised of packets native to Prism software. The IP Module will respond to ICMP traffic (PING) for verification of proper configuration. Prism software is required in order to read and send data to the IP Module and through the CommLink IV to the control system. The IP Module connects to the host Ethernet system by means of the supplied 10 ft. long CAT 5 Ethernet crossover cable which plugs into the 10/100 Base-T, RJ-45 jack on the back of the CommLink IV and into a Ethernet router or Ethernet modem on your building's LAN. Setup of the CommLink IV with the IP Module requires a knowledgeable IT person familiar with configuring network adapters and TCP/IP systems. Prism software must be installed on the local LAN computer(s) and/or remote Internet computers that will be used to program and monitor the control system.

Technical Data		OE415-02 IP Module Kit	
Operating Temperature	10°F to 140°F	Media Access Control	CSMA/CD with ACK
Operating Humidity	90% RH Non-Condensing	Network Connection	10/100 Base-T Ethernet RJ-45 MDI Socket
Protocols Supported	ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, BOOTP, Auto IP, HTTP, SMTP, TFTP	Flow Control	XON/XOFF (Software), CTS/RTS (Hardware), None
Network Interface	IEEE 802.3 RJ45 Ethernet 10BASE-T Or 100BASE-TX (Auto-sensing)	Management	Internal Web Server, SNMP (Read Only), Serial Login, Telnet Login, Device Installer Software
3 Year Warranty		WattMaster reserves the right to change specifications without notice	

PT-Link (Protocol Translator)

Description

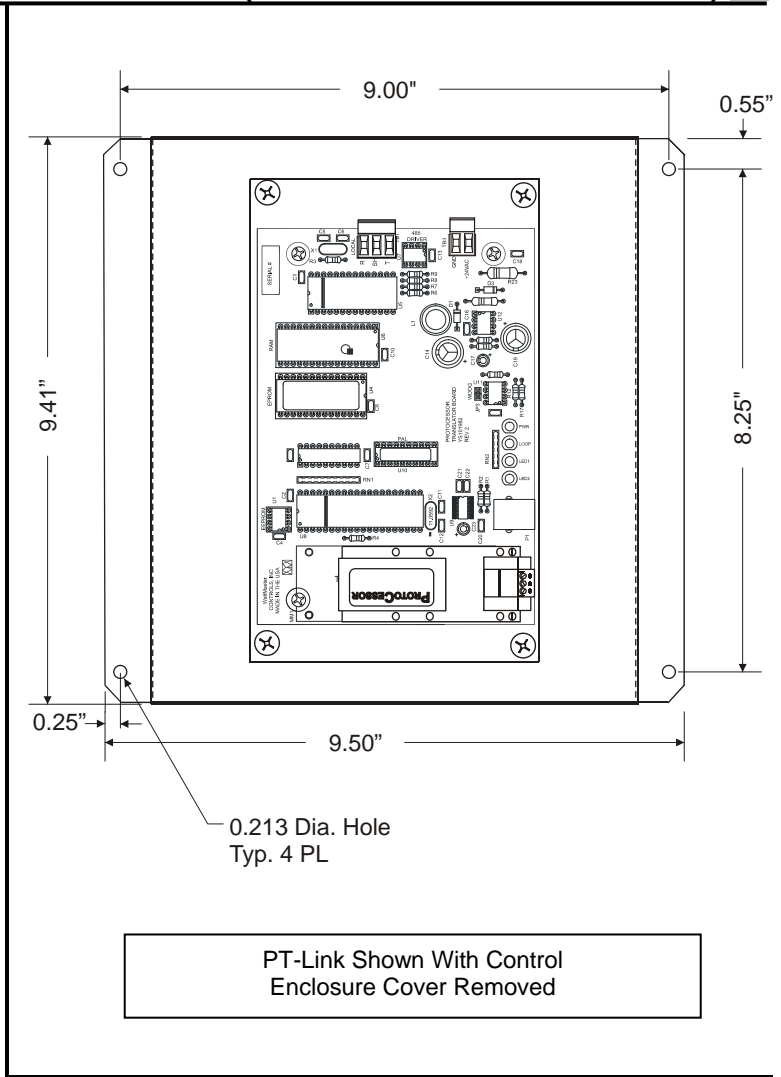
The OE368-22 PT-Link (Protocol Translator) is used to provide bi-directional translation of data and information between a specific communication protocol and the Orion HVAC unit controllers. Protocol specific plug in modules currently allow the PT-Link to communicate with BACnet®, LON®, and Johnson N2® protocol devices. The Orion PT-Link also provides you with the new WattMaster trademarked "Protocol Adaptability®" feature. This provides for integration with any future protocols that may be released by means of a simple plug-in module on the PT-Link.

The OE368-22 PT- Link is supplied complete with one communication protocol module installed.

The LON® version allows (1) Orion controller to be connected to the PT- Link Protocol Translator. The Johnson N2® and BACnet® protocols allow up to (4) Orion controllers to be connected to the PT- Link Protocol Translator. An unlimited number of individual PT-Link Protocol Translators can be used on your project.

The OE368-22 PT- Link provides the following features:

- The PT-Link can operate at Baud rates of 9600, 19200, 38400 or 76800 Baud as required by the specific protocol being used.
- Designed to provide values from points on the Orion controller side of the gateway to devices using other protocols as if the values were originating from the protocol device objects.
- Ability to allow devices with another protocol to modify point values on the Orion controller side of the gateway by using their standard protocol write services.
- Devices with another protocol can place the Orion Controller into occupied or unoccupied operation on the Orion controller side of the gateway by using their standard protocol write services.



Mounting

Supplied mounted in the EE000075-01 indoor rated control enclosure. This enclosure is provided with 4 mounting holes for wall mounting. It is recommended that the PT-Link be mounted indoors. Typically it is mounted in an equipment room inside the building, but can be mounted in any location that meets the operating temperature and humidity conditions listed below.

Technical Data		OE368-22 PT-Link	
Power	24 Volt AC	BACnet®, LON®, and Johnson N2® Protocol Communications	RS-485, 9600, 19200, 38400, 76800 Manually Selectable Baud Rates for Specified Protocol Requirements
Power Consumption	10 VA Maximum	Orion Controller Loop	RS-485, 9600 Baud
Operating Temp	10°F to 149°F	Specified Protocol Communications	Supports Specified Protocols Native Communication Format
Operating Humidity	90% RH Non-Condensing	Orion Controller Protocol Communications	HSI Open Protocol Token Passing
Weight	8 oz		
Three Year Warranty		WattMaster reserves the right to change specifications without notice	

PT-Link II (Protocol Translator)

Description

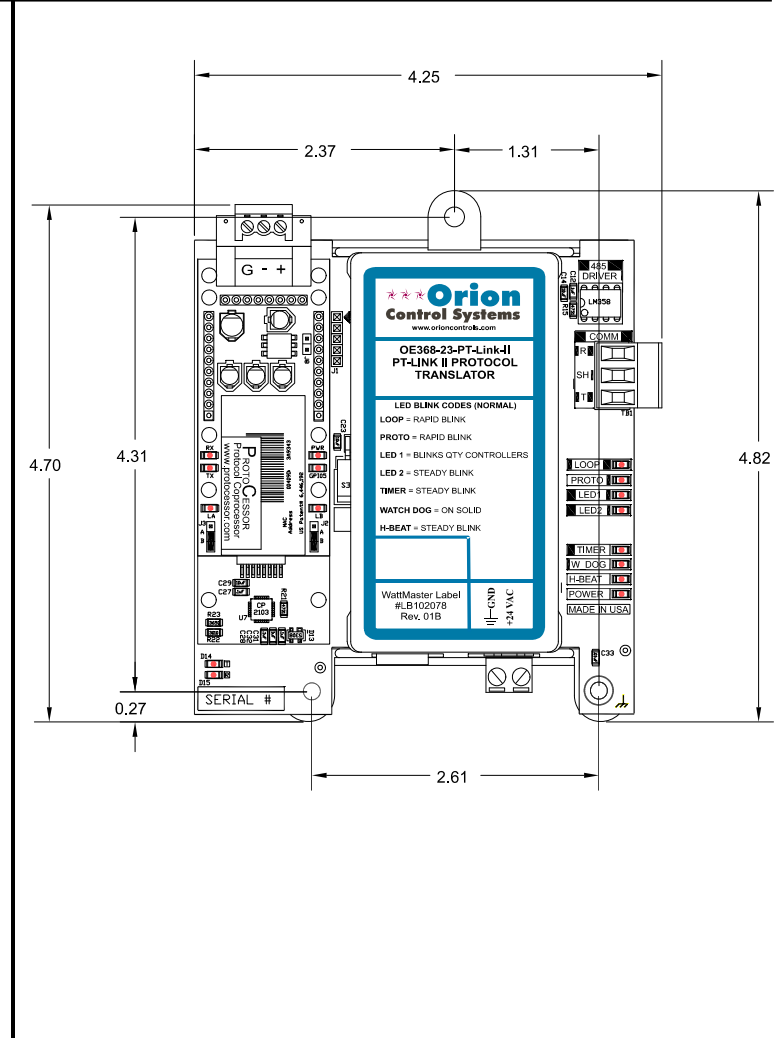
The OE368-23 PT-Link II (Protocol Translator) is used to provide bi-directional translation of data and information between a specific communication protocol and the Orion HVAC unit controllers. Protocol specific plug in modules currently allow the PT-Link II to communicate with BACnet®, LON®, and Johnson N2® protocol devices. The Orion PT-Link II also provides you with the new WattMaster trademarked "Protocol Adaptability" feature. This provides for integration with any future protocols that may be released by means of a simple plug-in module on the PT-Link II.

The PT-Link II is supplied complete with one communication protocol module installed.

The LON® version allows (1) Orion controller to be connected to the PT-Link II Protocol Translator. The Johnson N2® and BACnet® protocols allow up to (4) Orion controllers to be connected to the PT-Link II Protocol Translator. An unlimited number of individual PT-Link II Protocol Translators can be used on your project.

The PT-Link II provides the following features:

- The PT-Link II can operate at Baud rates of 9600, 19200, 38400, or 76800 or Baud as required by the specific protocol being used.
- Designed to provide values from points on the Orion controller side of the gateway to devices using other protocols as if the values were originating from the protocol device objects.
- Ability to allow devices with another protocol to modify point values on the Orion controller side of the gateway by using their standard protocol write services.
- Devices with another protocol can place the Orion Controller into occupied or unoccupied operation on the Orion controller side of the gateway by using their standard protocol write services.



Mounting

Supplied with an indoor-rated control enclosure. This enclosure is provided with 3 mounting holes for wall mounting. It is recommended that the PT-Link II be mounted indoors. Typically it is mounted in an equipment room inside the building, but can be mounted in any location that meets the operating temperature and humidity conditions listed below.

Technical Data		OE368-23 PT-Link II	
Power	24 Volt AC 50/60 HZ	BACnet®, LON®, and Johnson N2® Protocol Communications	RS-485, 9600, 19200, 38400, 76800 Manually Selectable Baud Rates for Specified Protocol Requirements
Power Consumption	10 VA Maximum	Orion Controller Loop	RS-485, 9600 Baud
Operating Temp	-30°F to 150°F	Specified Protocol Communications	Supports Specified Protocols Native Communication Format
Operating Humidity	Up to 90% RH Non-Condensing	Orion Controller Protocol Communications	HSI Open Protocol Token Passing
Weight	4.5 oz. BACnet/N2 4.7 oz. LON		
Three Year Warranty		WattMaster reserves the right to change specifications without notice.	

Description

Prism II is a complete Windows® based graphical interface that allows you to interact with your Orion digital controls systems. The program provides standard, easy-to-understand status, setpoint, and configuration screens for each type of controller and has provisions for custom screens which allow floor plans, equipment photos, or user defined summary screens.

Prism II allows you to access and control schedules, trend logs, and alarm conditions. The program can be configured for direct on-site installation, remote modem connection, or TCP/IP Internet connection.

The Prism II program is a completely redesigned release of the original Prism Graphical Computer Interface. This program should be used on all new installations containing standard Orion Control product families.

Feature Summary

Prism II provides a broad set of features:

- Easy to use
- On-site, remote modem, or TCP/IP communications
- User programmable description for every piece of equipment and user-defined custom screens
- Automatic retrieval of trend logs and export capability to spreadsheet and database programs
- Alarm Logs maintained on disk
- Alarm E-mail capability
- Encrypted History Logs

System Requirements

To use Prism II you must have a computer that meets or exceeds the following requirements:

Operating System

- Microsoft® Windows® 2000/ Windows® Vista, or Windows® 7

Minimum Hardware

- Windows® compatible computer
- Pentium 2 GHz Processor (Pentium 4 2 GHz or greater, Recommended)
- 1 GB RAM or greater)
- 120 MB hard drive space
- X VGA (1024 x 768) adapter and monitor (1280 x 1024, Recommended)
- Network card for TCP/IP connection when IP Module is used.

System Requirements

Prism II is available on a CD or can be downloaded for free from the Orion Controls web site at www.orioncontrols.com. Prism II does not require any license agreement and may be freely copied and distributed.

