Installation and Operations Manual

Siemens VersiComm – Cellular Gateway



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FCC Compliance

InHand IR915L access point was evaluated and confirmed to comply with: 47 CFR Part 15 Subpart B Class B: 2013.

Other Information

Product information is subject to change without notice. All trademarks are recognized as the property of their respective owners.

For Siemens VersiComm Warranty Terms and Conditions, see the Appendix on page 20 of this manual.

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1. Product Overview

The Siemens VersiComm is an all-in-one multiprotocol intelligent node solution for both Wi-Fi and cellular networks. The VersiComm is built for large scale EVSE implementations and can handle up to 25 charging stations. Directly integrating a combined, top-end Wi-Fi and cellular access point, the VersiComm is capable of handling large network traffic at top-of-the-line speeds, while implementing extreme measures to ensure the security of your network.

Wifi Communication

The Siemens VersiComm is equipped with an InRouter915L along with two, powerful omnidirectional antennas. The Siemens VersiComm supports IEEE 802.11 B/G/N.

Cellular Communication

In consolidating cellular connectivity from up to 25 charging stations into one VersiComm, significant cost savings can be achieved for an at-scale installation. The VersiComm utilizes the InRouter915L multiprotocol intelligent node along with two omnidirectional cellular antennas. Ideal for large scale networks, the IR915L uses 4G/LTE networks.

Security Features

With cyber security becoming an ever-increasing issue, the Siemens VersiComm meets the challenge by providing a number of local area network security features including WEB/WPA/WPA2 for Wi-Fi and Local Authentication, Radius, TACACS+, LDAP, SPI, ACL, NAT, PAT, DMZ, Port Mapping, GRE, L2TP, IPSec, DMVPN, OpenVPN, PEM, PKCS12, SCEP, Anti-ARP, DMZ, and MAC filtering.

Easy Installation

The Siemens VersiComm comes ready to operate when shipped. Each VersiComm has a precommissioned ATT 4G LTE data plan inside, and is configured specifically for VersiCharge SG products. Mounting hardware is not included with the device, due to the amount of unique installations that will arise. Provisions for mounting are provided using brackets that are mounted on the four corners at the back-side of the unit. The unit can be mounted in a location of your choosing, with only conduit or cabling for 120v or 208/240V AC connections required. If conduit is not provided, sufficient strain relief should be provided by customer inside the enclosure. Care should be taken to maintain NEMA rating during installation by not compromising the seal around the door.

Outdoor Enclosure

With a rugged NEMA 4 enclosure, the combined cellular/Wi-Fi access point meeting strict UL, IEC, FCC, CCC, RCM, and PTCRB standards. The Siemens VersiComm is a built-to-last product well suited for most weather environments.

1.1 Quick Facts Table

Siemens VersiComm Solution System					
Attribute	Description				
Part Number	Single Phase: VC1COMMA Two Phase: VC2COMMA				
Circuit Requirements	Single Phase: 120V AC (L1, N, G) Minimum of 2 amp dedicated circuit is required for the VersiComm. Two Phase: 220/240V AC (L1, L2, G) Minimum of 2 amp dedicated circuit is required for the VersiComm.				
Weight	16 lbs, 7.25 kg				
Dimensions	13" x 18" x 9"				
Enclosure	NEMA 4				
Permanent installation	Yes				
Plug In Installation	No				
IR915L Access Point EMC Specifications	ESD Electrostatic Discharge Immunity: EN61000-4-2, level 4 RFI Radio Frequency Immunity: EN61000-4-3, level 4 EFT Electrical Fast Transient/Burst Immunity: EN61000-4-4, level 4 Surge Immunity: EN61000-4-5, level 3 Immunity to Conducted Disturbances: EN61000-4-6, level 4 Power Frequency Magnetic Field Immunity: EN61000-4-8, horizontal/vertical 400A/m (>level 4)				
IR915L Standards Compliance	Cellular: IEC 61850-3 and IEEE 1613 (electric power substations) WiFi: FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4				

	Power:			
	UL-Listed (UL 508, CSA C22.2 No. 107.1), File E364742			
	Enclosure:			
	NEMA 4			
Operating Temperature	-25°C to +70°C			
Operating Humidity	5% ~ 95% relative humidity (noncondensing)			
Scalability	Able to connect up to 25 Siemens VersiCharge SmartGrid units (VCSG30GRYUW or VCSG30GCPUW) to one VersiComm			
Cell Capabilities	(4G/3G) GSM/GPRS/EDGE Quad band UMTS/HSDPA+ 850/900/1800/1900MHz LTE B1, B2, B5, B8			
Wi-Fi Capabilities	IEEE 802.11 B/G/N			
IR915L Security Features	AAA: Local Authentication, Radius, TACACS+. LDAP Firewall: Stateful Packet Inspection (SPI), Anti-DoS Attack, Filtering Multicast/Ping package, Access Control List (ACL), NAT, PAT, DMZ, Port Mapping, Virtual Server Data Security: GRE, L2TP, IPSec, DMVPN, OpenVPN CA Certificate: PEM, PKCS12, SCEP Others: Anti-ARP, DMZ, MAC Filtering			

2. Important Safety Information

2.1 Read this First

This manual contains important instructions for use during installation, operation and maintenance of the Siemens VersiComm.

2.2 Symbol Legend

To reduce the risk of electrical shock, and to ensure the safe installation and operation of the Siemens VersiComm[™], the following safety symbols appear throughout this document to indicate dangerous conditions and important safety instructions.



DANGER Hazardous voltage. Will cause death or serious injury. Turn off Power before working on this equipment. This indicates a situation where the present voltage could cause injury or death. Extreme caution is required when servicing or installing the equipment referenced.



WARNING! This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.



NOTE: This indicates information particularly important for optimal system operation. Follow instructions closely.

2.3 Product Labels

The following symbols appear on the **product label** and are described here:



This label indicates the risk of hazardous voltage and electric shock which will cause death, serious injury, or substantial damage. Turn off power supplying this device before working inside.



Indicates connection point for Ground conductor.

2.4 Definitions

The term **EV** used in this manual refers to an electric vehicle.

The term **AC** used in this manual refers to alternating current.

2.5 Safety Instructions (General and Specific)



DANGER Hazardous voltage. Will cause death or serious injury. Turn off power supplying this equipment before working inside.

- Read this Installation and Operations Manual in its entirety prior to installing, maintaining, servicing or replacing a Siemens VersiComm.
- **Permits**: Be aware that many areas require special permits and/or utility approvals to install EV charging equipment. Contact your local electrical inspector's office and your local utility prior to beginning work to understand local requirements.
- Qualified person: Because of the inherent dangers of electricity, only a qualified person should install, maintain, service, or replace electrical wiring and connected equipment. For the purpose of this manual, a qualified person is one who is familiar with the installation, construction of operation of the equipment and the hazards involved. In addition, this person should meet the definition of a qualified person pursuant to the National Electrical Code® (NEC®)¹. Failure to comply with the recommendation of having a qualified person install the unit when electrical work is required may void the warranty provided with this device.



WARNING! Failure to properly seat seals can result in water, debris and other foreign objects entering into the device. These can cause damage to electrical components and prevent the device from functioning properly.

2.6 Instructions Pertaining to a Risk of Fire or Electric Shock



WARNING! When using electric products, basic precautions should always be followed, including the following. This manual contains important instructions for the VersiComm that shall be followed during installation, operation and maintenance of the unit:

- Read all of the instructions before using this product.
- Failure to follow these instructions may lead to death, serious injury or property damage.
- Any electrical wiring required to install this device shall conform to applicable codes and standards (ANSI/NFPA 70). A qualified electrician is recommended to perform these tasks.
- To reduce the risk of electric shock, never service, install or uninstall this device from service while energized.
- A torque driver shall be used to make power connections to ensure that adequate contact pressure is applied. See the installation section of this manual for additional details.
- A device provided with a wire connector for field installed wiring shall be provided with instructions specifying that the connector provided shall be used in making the field connection.
- An insulated grounding conductor that is identical in size, insulation material, and thickness to the grounded and ungrounded branch-circuit supply conductors, except that it is green with or without one or more yellow stripes, shall be installed as part of the branch circuit that supplies the device or system.
- The grounding conductor shall be grounded to earth at the service equipment or, when supplied by a separately derived system, at the supply transformer.
- Use 10-14 AWG solid or stranded wire, copper only, to power the device.

¹ National Electrical Code and NEC are Registered Trademarks of the National Fire Protection Association (NFPA)

2.7 Code and Standard References

- The enclosure of the VersiComm meets the requirements for the UL 508, NEMA 4 rating when seals are properly seated and antennae are properly installed. The door must be fully closed and locked to maintain this rating and to avoid nullifying the warranty. Any modifications to the enclosure, other than a NEMA 4 conduit hub added for the power cabling, will nullify the commitment of the NEMA rating and void the warranty of the VersiComm.
- The VersiComm meets the stated operational temperature range of -25°C 70°C in an environment that has humidity between 5% ~ 95% relative humidity (noncondensing).
- Up to 25 VersiCharge SG chargers can connect with the VersiComm in an outdoor setting where no objects obstruct the direct connection to the VersiComm. Large objects, those that scatter Wi-Fi signal, underground installations especially those near rebar, and other situational factors can affect the range of the VersiComm.
- The VersiComm's uplink and downlink speeds are based on an installation outdoors with no objects to interfere with the connection between the VersiComm antennas and the nearest cellular antenna.

3. Device Layout

3.1 Exterior

- 1. Cellular Antennae
- 2. Wi-Fi Antennae



3.2 Interior

3.2.1 VC1COMMA (120V)



3.2.1 VC2COMMA (208V or 240V)



4. Installation

Note: As per the safety instructions in section 2.5, a qualified person meeting the definition of a qualified person pursuant to the National Electrical Code® (NEC®)² should install the Siemens VersiComm.

4.1 Building Survey

Available voltage, current and frequency:

- The Siemens VersiComm can be powered with <u>either</u> 1 phase 120VAC (VC1COMMA) <u>or</u> 220-240VAC (VC2COMMA) depending on the variant purchased. The rated line range is 47-63 Hz. The input current varies from 0.15 – 0.6A. The complete electrical structure of the building must be adequately sized to handle the entire building energy load, under peak conditions.
- Checking for adequate power includes all the connections from the utility through the entire circuit structure to the branch circuit position and connected wiring.
- Utility connection and transformer capacity check with utility service provider to ensure enough power is available for the building and the VersiComm under full loading.

4.2 Site Selection Recomendations

Due to the locations of the Wi-Fi and cellular antennae, it is desirable for the VersiComm to be installed in an elevated location, at a height greater than that of all EVSE connecting to the box, and within a reasonable, line of sight distance to the chargers. All VersiCharge SG units located in the hub should be directly ahead of or at angle to the VersiComm. Make sure that the Wi-Fi antennae of the VersiComm are located in a manner in which they have the best direct line to all chargers. Keep in mind situations where cars are parked in front of the VersiCharge when finding a mounting location for the VersiComm. For underground parking lots, Wi-Fi repeaters or a second VersiComm might be needed for the connection to the VersiCharges, and an antennae mounted outside of the parking garage might be needed for adequate cellular coverage. A professional installer will be able to provide insight as to optimal locations for placement.

4.3 Powering the VersiComm

Creating a cutout for Conduit Hub



DANGER Hazardous voltage. Will cause death or serious injury. Turn off Power before working on this equipment. This indicates a situation where the present voltage could cause injury or death. Extreme caution is required when servicing or installing the equipment referenced.

² National Electrical Code and NEC are Registered Trademarks of the National Fire Protection Association (NFPA)

It is the responsibility of the installer to create a cutout in the VersiComm enclosure for power cabling to be brought to the power supply. The installer is also responsible for selecting a conduit hub that will maintain the NEMA 4 rating of the device or the warranty of the product will be void. No cutouts were added during manufacturing to give the installer the ability to choose which side of the enclosure to have the cutout. Cut out from the top is not suggested. Once the cutout has been created and the NEMA 4 or greater conduit hub is in place, make sure to remove any metal shavings from the inside of the box to avoid damaging electronics inside..., Wiring should be as follow :.



VC1COMMA (120V)

VC2COMMA (208V or 240V)



4.4 Mounting the VersiComm

Note: It is highly recommended the installer complete the entirety of **Section 5: Commissioning/Operation** prior to mounting the device in its selected site. This will allow the user to ensure the functionality of the entire system while it is easily accessible.

Due to the variety of installation locations and mounting options, it is left up the installer to choose the best method for mounting the VersiComm. This being said, it is recommended to have the VersiComm in a location above the chargers, and have antenna's that are unobstructed by external obstructions.

There is a key provided for the DIN 3mm lock on the front of the unit. If this part is lost, it is the owner's responsibility to procure a new key. The part number for the key is LSK503 and it is common. The website that the key can be ordered from is: <u>https://www.eldon.com/LSK503-en_US-Key_for_DIN_3mm_lock.aspx</u>

5. Commissioning/Operation

5.1 Overview

The VersiComm is designed to be largely ready to operate as shipped, with the user having only to follow the installation instructions of section 4.

5.2 Initial Power On

The IR915L Wi-Fi/Cellular access point is preconfigured to act as your Siemens VersiCharge SG Hub. The IR915L will come with an AT&T SIM card pre-loaded.



Once power is supplied to the VersiComm, the IR915L access point will become active. After a few minutes, the following LED's will be solid: Red Power LED, Green SIM LED #1, Green

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Modem LED and Green WLAN LED. The Red Error LED should not be lit. At times, the Green Status LED will blink while the others above are solid, and this is normal as well. See below for more information:

Power (Red)	Status (Green)	Warn (Yellow)	Error (Red)	Description
On	On	On	Off	Powered On
On	Blinking	On	Off	Power on Success
On	Blinking	Blinking	Off	Dialing
On	Blinking	Off	Off	Dialing success
On	Blinking	Blinking	Blinking	Upgrading
On	Blinking	On	Blinking	Reset Success

Signal strength of the SIM card can be confirmed using the table below.

Green LED 1	Green LED 2	Green LED 3	Description	
Off	Off	Off	No Signal	
On	Off	Off	Weak Signal Strength	
On	On	Off	Good Signal Strength	
On	On	On	Strong Signal Strength	

5.3 Setting Up SIM card

The cellular node is preconfigured for the AT&T SIM card included in the router. It is not recommended to replace or tamper with the SIM card since it has been specifically configured for this application.



IMPORTANT: If the following steps are not completed, service to the SIM card will be cancelled. To register the SIM card in this device, you will need to email support@versichargesg.comwith the following information: 1. Serial number(s) of VersiComm(s) that have been purchased (located inside the front cover of the unit(s) on the "Rating Label" as seen in the picture below) 2. Address of installation for VersiComm(s) 3. Company name of purchaser 4. Siemens account # (if available) 5. Email, phone number, and contact name for future data plan billing purposes.



Once the unit is on and the SIM card is out of the inventory mode, verify the green Modem LED and Green SIM LED #1 are on and not blinking to confirm that the cellular network is working effectively. Please do not replace the SIM card in the unit, as it has been set up specifically for the applications needed to effectively manage VersiCharge implementations.

5.4 Wi-Fi

The WLAN credentials (SSID and Password) are printed and sent with the VersiComm. If this document is lost, please contact customer support at 1-800-333-7421. After you are confirmed to be the owner of the VersiComm, the credentials will be given to you.

Once the charger is online as seen above, and there is at least good signal designated by 2 green LED's, use the following steps to connect the confirm Wi-Fi connection. Begin by connecting a Wi-Fi enabled device (I.E. cell phone or computer) to the access point to verify the network is functioning correctly and has internet access.

If the user wishes to view any of the default settings configured for the IR915L, simply enter the default IP address to access the web portal, https://192.168.2.1, into a web browser of a device connected to the VersiComm router. When connecting please ignore security warnings. The username and password for the web-based management tools are provided with VersiComm package on the document that includes the WLAN credentials. If this sheet is lost please follow the customer support information above to retrieve the username and password.

Another way to test the internet connection if you do not want to log on using a Wi-Fi enabled device is by logging into the web portal using the credentials on the document sent with the VersiComm. Once you have logged on, scroll over tools on the left and click on ping. This can be seen in the picture below.

Firefox Web Bro	wser			1	t∎ En 🖁 📧 (100%) ⊣× 3:21 PM 🔱		
😣 🖱 🗐 Router	Web Console - Mozilla Firefox						
Ma Router Web C	Console × +						
(←) → ℃ @	0 🔒 https://192.16	8.2.1		🛡 🏠 🔍 Search	III\ 🖸 🔛 🗏		
A Most Visited	🥑 Getting Started 🔳 IPSEC VPN	on Ubunt					
inphand	Tools				Username: evusr		
Administration	•				Alarm		
Network	Host	google.com)	Ping			
Services	Ping Count				Iotal Alarms: 0		
Link Backup					Atarm Summary		
Routing	Packet Size	32 Bytes			- : 3 :		
Firewall	Expert Options				Stop		
VPN	•						
Python	PING google.com (74	PING google.com (74.125.196.138): 32 data bytes					
Industrial	+ 40 bytes from 74.12	, 40 bytes from 74.125.196.138: seq=0 ttl=42 time=80.484 ms					
	Ping 74.12	5.196.138: seq=2 ttl=42	time=79.475 ms				
Wizards	Traceroute 74.12	5.196.138: seq=3 ttl=42	time=/9.020 ms				
	Tcpdump m ping	statistics	On analyst lass				
	Link Speed Test Insmitt Fround-trip min/avg/	ed, 4 packets received, max = 29.803/67.195/80.	0% packet loss 484 ms				

Once you have clicked on ping, type "google.com" in the host section as seen above and click the ping button. This will provide data bytes as seen above and show 0% packet loss. If this is not true, please follow the troubleshooting guide below for more assistance.



Notes: The user manual for the IR915L router can be found using the following link: <u>https://www.inhandnetworks.com/upload/attachment/201707/10/034659/InRouter900_Series_U</u> <u>ser_Manual_v3.4_July2017.pdf</u>. This document can assist in any setup and/or troubleshooting needed for the modem.

5.5 Connecting your VersiCharge SG to the VersiComm

In order to set up the VersiCharge for connection to the VersiComm Wi-Fi network, the installer must first follow the installation instructions for the EV chargers using the "Installation Manual" included with each charger or by following the instructions online: (https://w3.usa.siemens.com/powerdistribution/us/SiteCollectionDocuments/VersiCharge%20S G%20Installation%20and%20Operations%20Manual.pdf).

Once the EV chargers have been installed correctly, please follow the instructions in the "Quick Setup Guide" to get the EV chargers to communicate with the VersiComm. This document can also be found at: <u>https://w3.usa.siemens.com/powerdistribution/us/en/product-portfolio/electricvehicle/versicharge/Documents/Quick%20Setup%20Guide%20single%20pages</u> pdf After following these steps, the charging station will begin to connect to the VersiComm Wi-

<u>.pdf</u>. After following these steps, the charging station will begin to connect to the VersiComm Wi-Fi network.

6.1 Troubleshooting

6.1 General Settings

- Verify the Wi-Fi network is active by checking the available networks in the area. The VersiComm will have an SSID that uses the following syntax: "VersiCommXXXX". This is the same SSID that was given on the document included with the VersiComm. If the document is lost, call technical support (1-800-333-7421), provide serial number, and Siemens will help to provide credentials once owner's identity is verified.
- After at least one charger is commissioned to the VersiComm, verify the cellular network is active by entering the IP address assigned to the IR915L into any web browser of a device that is connected to the VersiComm. <u>https://XXX.XXX.XXX.XXX/login.html</u>. (X's stand for numbers in a charger's local IP address). To find charger's IP address, log into the web portal of the IR915L using credentials provided on the document shipped with the VersiComm. Then go to the navigation menu on the left side of the screen and scroll over "services", then click on "DHCP". The IP address for the charger will be shown on this page. If commissioning failed, you can resubmit here. Otherwise, you can view charger status and other information here.
- If the Wi-Fi or cellular systems are inactive or any red lights appears on either the IR915L, first review the router's installation document here https://www.inhandnetworks.com/upload/attachment/201707/10/034659/InRouter900_Series_User_Manual_v3.4_July2017.pdf.
- Test internet connection by logging into admin mode. Then go to tools on the left side and then ping. In ping, put "google.com" and click ping button. More instructions can be seen in section 5.3.

7. Warranty

7.1 Limited Warranty

(a) *Warranties.* Siemens warrants that: (i) each Product is free from defects in material and workmanship; (ii) each Product materially conforms to Siemens' specifications that are attached to, or expressly incorporated into this Agreement; and (iii) at the time of delivery, Siemens has title to each Product free and clear of liens and encumbrances (collectively, the "Warranties"). The Warranties do not apply to software furnished by Siemens. The sole and exclusive warranties for any software are set forth in the applicable Software License/Warranty Addendum.

(b) *Conditions to the Warranties*. The Warranties are conditioned on: (i) no repairs, modifications or alterations being made to the Product other than by Siemens or its authorized representatives; (ii) Buyer handling, using, storing, installing, operating and maintaining the Product in compliance with any parameters or instructions in any specifications attached to, or incorporated into this Agreement; (iii) compliance with all generally accepted industry standards; (iv) Buyer discontinuing use of the Product after it has, or should have had, knowledge of any defect; (v) Buyer providing prompt written notice of any warranty claims within the warranty period described below; (vi) at Siemens' discretion, Buyer either removing and shipping the Product or non-conforming part thereof to Siemens, at Buyer's expense, or granting Siemens reasonable access to the Products to assess the warranty claims; (vii) Product not having been subjected to accident (including force majeure), alteration, abuse or misuse; and (viii) Buyer not being in default of any payment obligation.

(c) *Exclusions from Warranty Coverage.* The Warranties do not apply to any equipment not provided by Siemens under this Agreement.

Any Product that is described as being experimental, developmental, prototype, or pilot is specifically excluded from the Warranties and is provided to Buyer "as is" with no warranties of any kind. Normal wear and tear is excluded, including any expendable items that comprise part of the Product (such as fuses, light bulbs and lamps). Siemens does not warrant or guarantee that any Product will be secure from cyber threats, hacking or similar malicious activity. Products that are networked, connected to the internet, or otherwise connected to computers or other devices must be appropriately protected by Buyer and/or end user against unauthorized access.

(d) *Warranty Period*. Buyer must provide written notice of any claims for breach of Warranties by the twelve (12) months from shipment. Additionally, absent written notice within the warranty period, any use or possession of the Product after expiration of the warranty period is conclusive evidence that the Warranties have been satisfied.

(e) *Remedies.* Buyer's sole and exclusive remedies for breach of the Warranties are limited, at Siemens' discretion, to repair or replacement of the Product, or its non-conforming parts, within a reasonable time

period, or refund of all or part of the purchase price. The warranty on repaired or replaced parts is limited to the remainder of the original warranty period. Unless Siemens agrees otherwise in writing, Buyer will be responsible for any costs associated with: (i) gaining access to the Product; (ii) removal, disassembly, replacement, installation, or reinstallation of any equipment, materials or structures to permit Siemens to perform its warranty obligations; (iii) transportation to and from the Siemens factory or repair facility; and (iv) damage to equipment components or parts resulting in whole or in part from non-compliance by the Buyer with Article 9(b) or from their deteriorated condition. All exchanged Products replaced under this Warranty will become the property of Siemens.

(f) *Transferability*. The Warranties are only transferable during the warranty period and only to the Product's initial end-user.

(g) THE WARRANTIES IN THIS ARTICLE 7 ARE SIEMENS' SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITS OF LIABILITY IN ARTICLE 10 BELOW. SIEMENS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

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SIEMENS' MAXIMUM LIABILITY UNDER THIS AGREEMENT IS THE ACTUAL PURCHASE PRICE RECEIVED BY SIEMENS FOR THE PRODUCT THAT GAVE RISE TO THE CLAIM.

BUYER AGREES THAT THE EXCLUSIONS AND LIMITATIONS IN THIS ARTICLE 10 WILL PREVAIL OVER ANY CONFLICTING TERMS AND CONDITIONS IN THIS AGREEMENT AND MUST BE GIVEN FULL FORCE AND EFFECT, WHETHER OR NOT ANY OR ALL SUCH REMEDIES ARE DETERMINED TO HAVE FAILED OF THEIR ESSENTIAL PURPOSE. THESE LIMITATIONS OF LIABILITY ARE EFFECTIVE EVEN IF SIEMENS HAS BEEN ADVISED BY BUYER OF THE POSSIBILITY OF SUCH DAMAGES. THE WAIVERS AND DISCLAIMERS OF LIABILITY, RELEASES FROM LIABILITY AND LIMITATIONS ON LIABILITY EXPRESSED IN THIS ARTICLE 10 EXTEND TO SIEMENS' AFFILIATES, PARTNERS, PRINCIPALS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES, SUPPLIERS, AGENTS, AND SUCCESSORS AND ASSIGNS.

To obtain repair or replacement service under this Limited Warranty, the customer must comply with the following policy and procedure:

• All Defective Product must be returned with a Return Merchandise Authorization Number (RMA) which customer must request from Siemens.

• RMA request must include the following information:

• Proof-of-purchase of the Defective Product in the form of (1) the dated purchase receipt from the original purchase of the product at point of sale to the end user, or (2) the dated dealer invoice or purchase receipt showing original equipment manufacturer (OEM) status, or (3) the dated invoice or purchase receipt showing the product exchanged under warranty.

- Model number of the Defective Product
- Serial number of the Defective Product
- Detailed description of the defect
- · Shipping address for return of the repaired or replacement product

• All Defective Product authorized for return must be returned in the original shipping container or other packaging that is equally protective of the product

• The returned Defective Product must not have been disassembled or modified without the prior written authorization of Siemens