



## infinias eIDC<sup>32</sup> | QUICK START GUIDE

# **Important Safety Instructions**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
- 8. Only use attachments/accessories specified by the manufacturer.
- 9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
- 11. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 12. Installation should be done only by qualified personnel and conform to all local codes.
- Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
- 14. Make sure that attached devices do not exceed their listed power capabilities.

- 15. A readily accessible disconnect device shall be incorporated in the building installation wiring.
- 16. The socket-outlet shall be installed near the equipment and shall be easily accessible.

#### Supplementary Instructions

Only use replacement parts recommended by infinias.

The product and/or manual may bear the following marks:

## CAUTION:

RISK OF ELECTRIC SHOCK. DO NOT OPEN.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

# **Before You Begin**

This quick start guide provides brief instructions on how to install the **infinias**<sup>®</sup> eIDC hardware component. The eIDC is an Ethernetenabled Integrated Door Controller for access control. An additional component, the Power Injector, is a PoE (Power over Ethernet) power supply that has a built-in integral DC power injector. The Power Injector can be used with the eIDC when using a non-Ethernet switch.

Each eIDC is configured with an internal web server that is capable of serving web pages for configuring and using the device. This allows an eIDC to be used as a stand-alone unit for a single door; that is, the eIDC web software can be used to manage, view, and report activity through an eIDC controlled network. This guide contains brief instructions for installing the eIDC and configuring the eIDC web server.

Install the eIDC hardware components and configure the device as instructed in this document. It is recommended that you familiarize yourself with these instructions before beginning installation.

The "infinias Hardware Installation and Reference" manual and the "infinias Web Interface User's Guide" contain more detailed information. These manuals are located on our website at

www.3xlogic.com.

# **CONNECT TO AN ETHERNET SWITCH**



Figure 1. Sample System Configuration

**IMPORTANT:** For Options 1, 2, and 4 do not add an additional power supply to terminals PWI<sup>+</sup> or PWI<sup>-</sup> (refer to Figure 2) on the eIDC.



- 1. Using PoE, run a standard network cable (Cat 5 or Cat 6) directly from the Ethernet switch to the eIDC.
- 2. Put an Uninterruptable Power Supply (UPS) at the switch to provide redundant power.
- 3. Go to *Determine the eIDC IP Address* on page 8 and complete the installation.

#### **2** NON-POE WITH MIDSPAN POE INJECTOR

- 1. Using non-PoE, run a standard network cable (Cat 5 or Cat 6) directly from the Ethernet switch to the Midspan PoE Injector.
- 2. Put an Uninterruptable Power Supply (UPS) to both the Midspan PoE Injector and the switch to provide redundant power.
- 3. Run another standard network cable (Cat 5 or Cat 6) from the Midspan PoE Injector to the eIDC Ethernet connector.
- 4. Go to *Determine the eIDC IP Address* on page 8 and complete the installation

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- 1. Using non-PoE, run a standard network cable (Cat 5 or Cat 6) directly from the Ethernet switch to the eIDC.
- 2. Wire a redundant 24 VDC power supply to the eIDC and then apply power.
- 3. Go to *Determine the eIDC IP Address* on page 8 and complete the installation

#### 4 NON-PoE WITH POWER INJECTOR

- 1. Using non-PoE when only a small number of ports will require PoE, run a standard network cable (Cat 5 or Cat 6) directly from the Ethernet switch to the Power Injector.
- 2. Wire a redundant 24 VDC power supply to the Power Injector and then apply power.

**NOTE:** With PoE, the external power supply connected to the Power Injector may not be required. If both a PoE-enabled switch and DC power are connected to the Power Injector, priority is given to the DC power supply. In such instances, PoE power is still being allocated by the PoE switch and counts toward the aggregate total power budget of the switch. For additional information about power restraints, refer to the "infinias Hardware Installation And Reference" manual.

- 3. Run another standard network cable (Cat 5 or Cat 6) from the Power Injector to the eIDC Ethernet connector.
- 4. Go to "Determine the eIDC IP Address" below and complete the installation.

#### **DETERMINE THE eIDC IP ADDRESS**

Once attached, the eIDC appears as a full IP client on the data network and requires an IP address. The eIDC network connection is either for static addressing or Dynamic Host Configuration Protocol (DHCP) addressing. Use of a DHCP permanently leased IP address or a static IP address is required by the eIDC.

When power is initially applied to the eIDC, the eIDC sends a signal to the current IP address. A signal is also sent when the eIDC is rebooted.

To determine the type of IP address:

- 1. Connect power to the eIDC.
- Use the numbered LEDs, located on the upper-left and upper-right sides of the eIDC module, to note the IP address: left side, 1 to 5; right side, 6 to 0.
- Disconnect the power from the eIDC, and then reconnect the power. The eIDC unit starts and attempts to acquire an IP address. (This occurs because the eIDC is shipped from the factory set for DHCP addressing).

- 4. Determine the network IP address type: DHCP or static.
- WARNING: Do not use DHCP addressing with an expiration time limit; the DHCP address *must be a permanently leased address*. A permanently leased address assigned by the network to the eIDC will not expire (expiring causes the network to assign the eIDC a different address, which causes random failures with the eIDC and Supervisor Plus® software). Always consult the network administrator to verify that the network is using a permanently leased DHCP address.
  - a. DHCP: If the following sequence occurs when power is connected to the eIDC, the network IP address type may or may not be DHCP.
    - All LEDs flash three times to begin the sequence. (The eIDC is fully operational during IP address flashing.)
    - (2) Each numbered LED flashes once representing a number in the IP address. Each grouping of numbers in the address is separated by all LEDs flashing once, simultaneously.

For example, 145.198.1.1 interprets as follows:

- #1 flash, #4 flash, #5 flash, all flash;
- #1 flash, #9 flash, #8 flash, all flash;
- #1 flash, all flash;
- #1 flash, all flash
- (3) Once the sequence has repeated 3 times, the eIDC LEDs return to normal operation mode.
- b. Static: If the following sequence occurs when power is connected to the eIDC, the network IP address type is static:
  - All of the LEDs flash continuously (more than three times) for approximately 10 seconds. This means a DHCP IP address cannot be determined or there is no DHCP connection.
  - (2) The eIDC reverts to its default static address (169.254.1.1).

**NOTE:** The default static address can be changed when the eIDC is configured (refer to *Change the eIDC to DHCP or Static IP Mode* on page 10).

5. Go to *Configure the eIDC with the Web Server* and complete the installation.

# **CONFIGURE THE eIDC WITH THE WEB SERVER**

The eIDC has a built-in server which allows a Web browser to connect to the eIDC.

**IMPORTANT:** If static addressing is to be used, you must obtain a valid static IP Address, Subnet Mask, and Gateway from the network administrator of the facility where the eIDC is located. You will need this information to change the eIDC default static IP address (169.254.1.1).

#### **CONNECT TO THE eIDC**

- 1. Open a standard Web browser.
- Type the IP address given by the eIDC (DHCP or static) into the address bar of the browser to locate and configure the eIDC, and then press Enter. The infinias Web Edition screen appears.
- 3. Click the "Click Here to Start" button. The login screen appears.
- 4. Type admin (all lowercase) in the user name and password text boxes (admin is the default value for both of these fields). NOTE: If the user name and password have been are unknown, you will need to reset the eIDC to its factory default settings. Refer to the installation manual included on the resource disc.

#### CHANGE THE eIDC TO DHCP OR STATIC IP MODE

- 1. Click the System button, and then click Controllers.
- 2. Select the eIDC controller, and then click the Modify button.
- 3. Select the IP mode: DHCP or static
  - a. **DHCP**: Verify that the Use DHCP check box is selected; DHCP is the default setting. For more information on DHCP addressing, refer to the installation manual included on the resource disc.
  - b. Static: Click the Use DHCP check box to clear the selection, and then type the new IP Address, Subnet Mask, and Gateway.
- 4. Click "OK," and then click "Done" to save the changes. The eIDC is now ready for further configuration and use.
- 5. Go to *Wire the elDC Door Components* on page 11 and complete the installation.

## WIRE THE eIDC DOOR COMPONENTS

Up to 750 mA of power is provided through the eIDC for peripheral devices. Figure 2 illustrates how to wire the eIDC for a single door.



Figure 2. eIDC Wiring for a Single Door

To wire the eIDC door components (refer to Figure 2):

- 1. Connect the magnetic lock or door strike.
  - A magnetic lock or door strike can be powered by the eIDC (12 VDC at 450 mA or less). This is a shared load.
  - The two open collector outputs, OC1 and OC2 (Output 1 and Output 2), provide a maximum of 12 VDC at 450 mA combined.
  - OC1 and OC2 each have their own negative terminal (–) terminal but share a positive (+) terminal.
  - OC1 and OC2 are software configurable energized (E) or de-energized (DE).
  - A magnetic lock can be powered by the open collector output if it draws less than 450 mA. If it draws more than 450 mA, then it must be wired to the form C relay (5 A at 30 VDC) labeled NO (normally open) and NC (normally closed) and powered externally.
  - Relay (Output 3) has separate terminals for common (C), normally open (NO), and normally closed (NC), but the software designation must match for proper status reporting.
- 2. Wire the status, shunt, and exit inputs.
  - Input devices can be wired to eIDC Inputs (IN) 1 to 4.
  - NO or NC is software configurable with Inputs 1 to 4.
  - End of line resistance (EOLR) supervision is software selectable and is supported with 1-kohm resistors.
- 3. Wire the readers.
  - Reader IN (CRI) and Reader OUT (CRO) are internally configured each having their own Data 0 (CR–), Data 1 (CR+), DC+, and DC–.
  - DC1– has a maximum load of 250 mA; DC2- has a maximum load of 250 mA.
  - The sum of all four open collectors (OC1 + OC2 + DC1 + DC2) must not exceed 750 mA.
  - There is a single terminal for optional Reader LED control and optional Reader Buzzer control.
  - Only readers can be wired to Data 0 (CR–), and Data 1 (CR+) terminals.

- **4.** Hardware installation for the eIDC is complete. For software installation, do one of the following:
  - If the eIDC is to be used as a stand-alone unit for a single door, then go to the *eIDC Web Server: Single Door Application* section on page 14.
  - If the elDC is to be used with infinias Access, then refer to the "infinias Access Quick Start Guide."
  - If the eIDC is to be used with Supervisor Plus, then refer to the "Supervisor Plus Quick Start Guide."

# eIDC Web Server: Single Door Application

If the eIDC is to be used as a stand-alone unit for a single door (neither **infinias** Access or Supervisor Plus will be used), you can easily use the eIDC's built-in web server and quickly program the system.

- 1. Open a standard Web browser.
- Type the IP address given by the eIDC into the address bar of the browser, and then press Enter. The Intelli-M Supervisor (Web Edition) screen appears.
- 3. Click the "Click Here to Start" button. The login screen appears.
- 4. Type **admin** (all lowercase) in the user name and password text boxes (admin is the default value for both of these fields), and then click the "Login" button.
- 5. From the Event screen, click the "System" button to display the "System Management" screen.
- 6. Click the "Database Management" button.
- 7. Click the "Load Default Configuration" button. (Click "OK" to close any dialog boxes that appear.)
- 8. After the device configuration is loaded, click the "Done" button.
- 9. Click the "Card Holders" button and do the following:
  - a. Add or Modify a card holder.
  - b. Fill in the "Site code" field and the "Card code" field.
  - c. Fill in the first name, last name, and company fields.

**NOTE:** The "Master Privilege Group" provides unrestricted access to the door and all services in the system. You can create additional groups with different privilege credentials. Refer to the "Web Interface User's Guide" for additional information.

- d. Click "OK" and then click the "Events" button.
- 10. Swipe the card at the active card reader to ensure the functionality of the system. Access should be granted.
- 11. Repeat Step 9 for the access cards of additional personnel.



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

#### **REVISION HISTORY**

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