

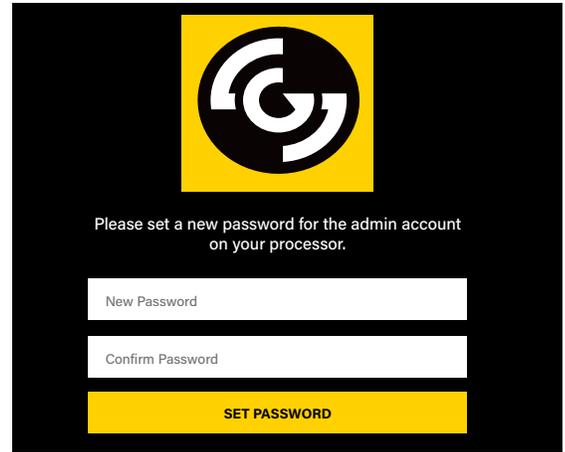
## 1. ACCESSING THE GS3 PROCESSOR OUT OF THE BOX

The GS3 Processor is shipped in a factory lock-down mode. To unlock your GS3, use the Gridsmart Device Manager to create a password for the admin account. While in this mode, only the laptop port is activated, and you will not be able to connect with the Gridsmart App.

### CONNECTING TO THE GS3 PROCESSOR

Confirm your laptop is set to DHCP. Connect your laptop to port "A" on the GS3 and open a browser (Google Chrome is recommended). Type <https://192.168.150.10:8900> into the address bar. You will be redirected to the login page where you can enter your new admin account information.

Your password requires at least eight characters. Keep your password in a secure place for future reference. After confirming your password, you will be redirected to the login page. Sign in using your new admin account information. Use your admin account to create additional accounts as needed or to configure Microsoft Active Directory or LDAP (Version 19.12 and later).



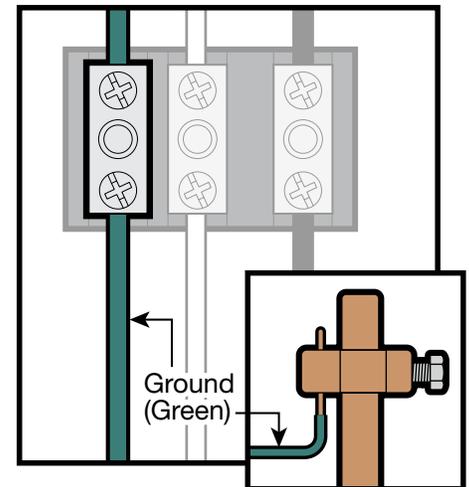
Login Page

**! SECURE THE ADMIN PASSWORD**  
 A lost admin password could result in loss of data and/or an RMA.

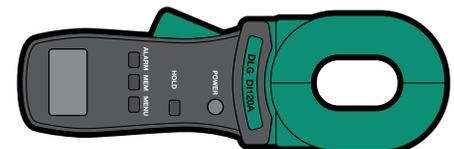
## 2. CABINET GROUNDING

A proper cabinet ground helps mitigate interference from electrical noise at the intersection.

- The U.S. National Electrical Code (NEC) recommends a maximum of 25 ohms for touch safety and telecommunications; PLC industry standards require a maximum of 5.0 ohms for logic reference purposes.
- Use a clamp-on ground meter to verify the cabinet ground.
- Gridsmart requires the Diligent Instruments DLG Di-120b Tester (<http://www.diligentinstruments.com/di-120.html>) or equivalent.
- If the ground reading is higher than 25 ohms, check the connection between the cabinet ground wire and the ground rod for corrosion; clean if corrosion is present. If you are in an area with poor grounds, you may need to add a ground rod to the grounding system to improve the ground.

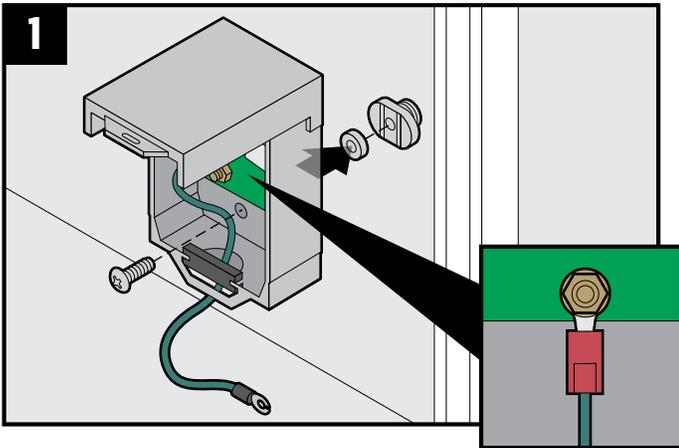


DLG Di-120b Tester

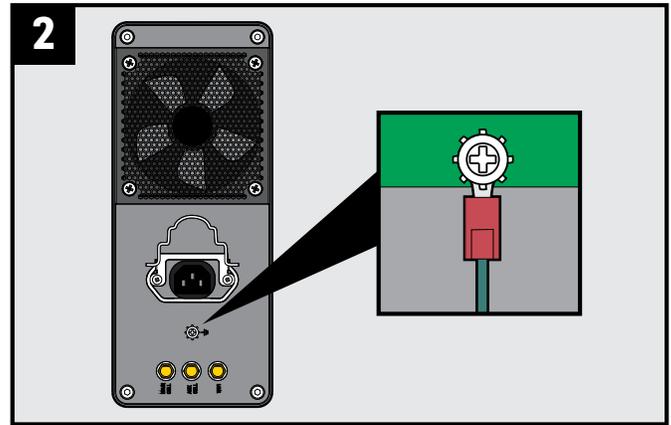


|                       |         |
|-----------------------|---------|
| <b>SPECIFICATIONS</b> | 25 ohms |
| <b>MEASURED</b>       |         |

## 2. CABINET GROUNDING (CONTINUED)



Install EPM onto cabinet DIN rail on opposite side from power distribution. Cut along rubber grommet "X". Connect 10AWG ground wire as close to ground rod as possible using ground wire clamp.



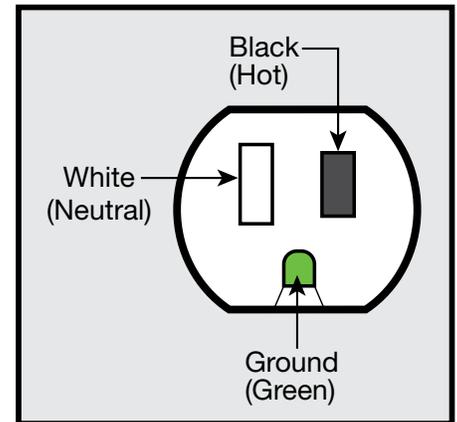
Connect 10AWG ground wire as close to ground rod as possible using ground wire clamp.

## 3. AC POWER

Plug the Gridsmart Processor into an outlet on the filtered side of the cabinet power. Do not use GFCI type outlet.

- Verify that all three connections for the outlet are properly connected.
- Using a digital voltmeter (DVM), check the AC voltage between Hot and Neutral and Hot to ground. Both readings should be ~120/240VAC.

|                       |  |
|-----------------------|--|
| <b>SPECIFICATIONS</b> | HOT/NEU: 120/240VAC<br>HOT/GND: 120/240VAC |
| <b>MEASURED</b>       | HOT/NEU:<br>HOT/GND:                       |

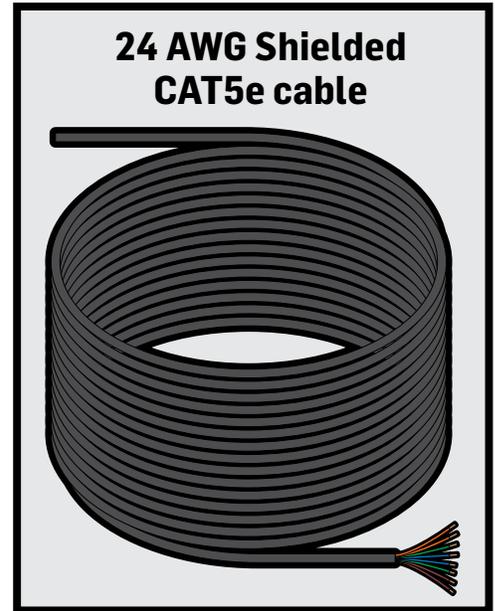


## 4. CABLE TYPE & LENGTH

All Gridsmart ethernet installations require burial grade, shielded, gel filled, CAT5e cable with solid core 24 AWG conductors. The shield will protect the data signals from radiated noise which is present in most intersections. LED streetlights have been found to be very noisy electrically and as more streetlights are switched to LED lights, the level of radiated noise will increase. The cable that Gridsmart supplies and requires for all installations is Vertical Cable part #059-487/S/CMXF.

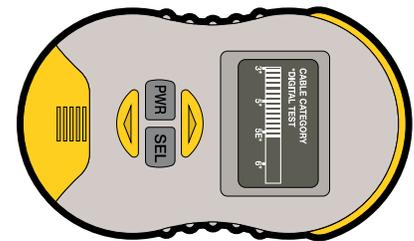
#### 4. CABLE TYPE & LENGTH (CONTINUED)

- The maximum length that a segment of CAT5e can be is 300 feet. If the distance from the EPM to the camera will exceed 300 feet, the SMARTMOUNT2025 fiber product MUST be used instead of ethernet.
- When determining length of the cable, a cable tester that measures the length of the cable is required. Do not rely on sight distance or “walking off” the distance.
- Many times, there are service loops in the pull boxes and at the base of the pole, which will not be accounted for when you do not use a meter for measuring the cable length. Gridsmart recommends the Triplet Real World Certifier ([www.triplett.com/shop/real-world-certifier-rwc1000k/](http://www.triplett.com/shop/real-world-certifier-rwc1000k/)) for testing the cable. The tester will provide length measurements as well as cable signal quality measurements.



|                       |  |
|-----------------------|--|
| <b>SPECIFICATIONS</b> | Cable Length: 300 Ft. Max<br>Real World Certification: 100 MB Min<br>Cable Type: Vertical Cable part# 059-487/S/CMXF |
| <b>MEASURED</b>       | Cable Length:<br>Real World Certification:<br>Cable Type:  |

#### Triplet Real World Certifier



#### 5. CONNECT DRAIN WIRE

The drain wire for the shielded CAT5e cable must be connected to ground in the EPM (Ethernet Protection Module). Install your EPM according to the instructions supplied with it. The drain should only be connected at the EPM end of the cable. DO NOT connect the drain wire at the camera end.

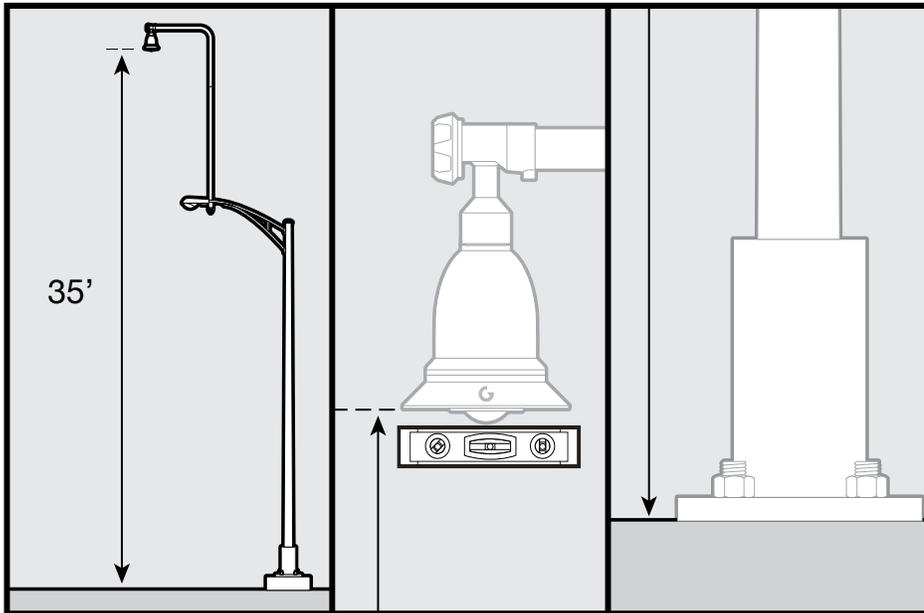
- The included 10 AWG Wire is required to connect the EPM ground post to the traffic cabinet ground rod.
- Using a digital voltmeter, you should measure 0 ohms between the EPM Ground Post and the traffic cabinet ground rod.

|                       |        |
|-----------------------|--------|
| <b>SPECIFICATIONS</b> | 0 Ohms |
| <b>MEASURED</b>       |        |

|                                    |  |
|------------------------------------|--|
| <b>Intersection:</b>               |  |
| <b>Camera Serial Number:</b>       |  |
| <b>GS3 Processor Serial Number</b> |  |

## 7. CAMERA HEIGHT

SMARTMOUNT Bell should be mounted at least 35' above the roadway. Using a laser or tape measure, measure the height of SMARTMOUNT Bell. Record the height for use later to set up system. Orient the "G" logo away from areas of consequence, ensure all approaches are fully visible, level the SMARTMOUNT Bell, and tighten the end cap and center set screw.



**!** Ensure luminaires, signal heads, and other potential obstructions do not block the camera view of important regions.



### GRIDSMART TRAINING VIDEOS

Need additional help? Visit our Vimeo channel to access Gridsmart training videos or contact our Customer Support Team, +1 866.652.5347.