INSTALLATION INSTRUCTIONS/USER MANUAL

DataGuardian Series

Din Rail Mount Protection System

IMPORTANT SAFETY INSTRUCTIONS CAUTION:

- 1. Never install telephone wiring during a lightning storm.
- 2. This product is intended for INDOOR USE ONLY.
- 3. Secondary Protectors are intended for use on the equipment side of a listed UL 497 Protector.
- 4. Primary Protectors are intended for use at the cable point of entry.
- 5. **Risk of Electric Shock** Protector is not to be used without the arrestor assembly installed.
- 6. The Protector is a one or two pair Protector. Applications that use more will not function.

INSTALLATION

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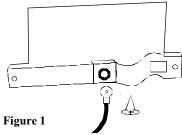
- 1. Read and understand all instructions.
- 2. The DGS modules can be installed individually, mounting to any flat surface using the two screw holes. DGS modules can also be installed on a Din Rail.

In planning an installation, location of the DGS unit in close proximity to the correct ground point is essential for protection performance. The correct ground point is defined as the ground reference used by the system to be protected. In most applications this is AC power ground.

MINIMIZE the distance between the DGS unit and the identified ground point to

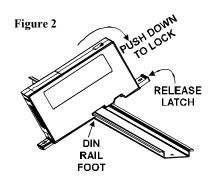
STAND-ALONE INSTALLATION

3. To install the DGS unit as a stand-alone unit, attach a ground wire (minimum #10 AWG for Primary Protector, minimum #14AWG for Secondary Protector) to the ring terminal provided. Using the self tapping screw provided, attach the ring terminal to the base of the unit. Using screws (or bolts) as appropriate, mount the unit to the flat surface (see figure 1).



MOUNTING AND GROUNDING ON A DIN RAIL

4. To install a DGS surge protector on a Din Rail, locate the Din Rail foot over the Din Rail and securely push the brass clip onto the Din rail. Rotate downward and push the DGS onto the Din rail until the latch snaps on to the rail. (see figure 2). To remove a module, gently pull the release latch forward and rotate the DGS upward off of the Din Rail. The surge protector is **now securely grounded to the Din Rail.** An existing or customer



supplied Din Rail can be used providing the rail is securely connected to the correct ground (see grounding section).

5. The 19" Din Rail assembly can be mounted onto any surface using the four mounting slots provided. The 19" Din Rail assembly will hold up to 16 DGS surge protectors. Use the same 19" Din Rail assembly for 19" rack mounting. The 5" Din Rail assembly is used for mounting up to 4 DGS surge protectors. Mount the rail to any surface using the two mounting holes provided. *NOTE: The Din Rail must be grounded, see grounding section.*

- 6. Any combination of DGS modules can be employed as required.
- 7. Connect the incoming line to the port marked "unprotected" on the DGS module. Run cable from the DGS port marked "protected" to the equipment to be protected. Additional instructions are provided below for connecting to terminal strips. **Note:** Always use the supplied patch cable on the protected side of the suppressor. **Patch cable wire size must not exceed #24AWG.**
- 8. Connect a green ground wire from the Din Rail or from the SO unit to the identified grounding point (see grounding section). Primary Protectors require a minimum #10AWG, Secondary Protectors require a minimum

GROUNDING:

The Din Rail grounding stud must be connected to the ground reference used by the system being protected. In a computer room environment this grounding point may be the ground bar in the AC power panel. Ground leads longer than 12" are not recommended.

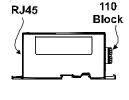
WARNING: The grounding lead must be as short as is practically possible. Minimize length to the inch.

The ground wire should be a minimum #14AWG for Secondary Protector applications and Primary Protector applications require a minimum #10AWG.

INDEPENDENT GROUNDS - Surge protection devices must <u>not be connected</u> to ground points that are independent of AC ground.

MODEL 24551

The 110 Block is wired per T568A. The diagram on the right shows the relationship from the 110 block to the RJ45. Use care when using the punchdown tool. Do not use excessive force.





CAGE CLAMP TERMINALS

The cage clamp mechanism used on these modules offers THE MOST SECURE wire connection available. The quality of connection is significantly better than standard screw terminals.



Insert a small screwdriver into the rectangular hole. Push screwdriver in and lever away from circular hole with moderate force. This will open the wire cage clamp



Insert stripped wire into circular hole.



Remove screwdriver. The wire is now secure.



Modules that use removable Terminal Strip connectors are keyed to be inserted one way only. Do not force a connector into its header the incorrect way.

If devices are received damaged, please notify the transportation company. Please retain all containers and packing materials for inspection.

Note: The protected device should also have AC suppression or it will still be vulnerable to transients from the incoming AC power. This can show up as failures on the communication interface.

