

Field Wiring Connections

Grounding the Module

This product is intended to be mounted to a well-grounded mounting surface such as a metal panel. Additional grounding connections from the module's mounting tabs or DIN rail (if used), are not required unless the mounting surface cannot be grounded. Refer to *Industrial Automation Wiring and Grounding Guidelines*, Allen-Bradley publication 1770-4.1, for additional information.

System Wiring Guidelines

Consider the following when wiring your system:

- Use Belden shielded, twisted-pair wire to ensure proper operation and high immunity to electrical noise. See "RTD Wiring Considerations".
- To limit noise, locate RTD and resistance device signal wires as far away as possible from power lines, load lines, and other sources of electrical noise, such as hard-contact switches, relays, and AC motor drives.
- Locate RTD modules away from other modules which generate a significant amount of heat, such as the 1769-IA16.
- Under normal conditions, the drain wire and shield junction should be connected to earth ground, via a panel or DIN rail mounting screw at the 1769-IR6 module end.
- Keep shield connection to ground as short as possible.
- To ensure optimum accuracy, limit overall cable impedance by keeping your cable as short as possible. Locate the I/O system as close to your sensors or actuators as your application will permit. See the table on the following page.