

V5-025 Galvanic Isolator for IRS and MATV System

- Safety Galvanic Isolator for interconnecting buildings/dwellings
- Easy bulkhead /mounting board fixing
- Wideband 5 – 2300MHz Terr/SAT
- 2.0dB typical insertion loss / 4dB max.
- F female connections



It is dangerous and illegal not to earth an aerial system or IRS installation in multiple dwellings to the MET (Main Earth Terminal) of a building in accordance with current legislation and codes of practice. The MET is usually where the mains supply enters the building or by the electrical supply meters. There are codes of practice that stipulate how this safety earth should be connected with 4mm² earth wire to protect persons working on, and those using the system. A competent person (electrician) may be required to provide a suitable earth connection.

However, it can also be dangerous to connect two or more dwellings or buildings together by coaxial cable, especially where the dwellings are supplied by different phases of the mains supply or from different utility substations. Balancing currents from the different earth-potentials at each location can flow along the coaxial cables creating a possible electrical shock condition at worst and likely equipment malfunction or damage at best.

The potential difference measured between two buildings can be several tens of volts so isolating these buildings is essential. Galvanic isolators can be used to create a voltage barrier between two buildings but still allow the RF signal to pass. A Vision V5-025 galvanic isolator should be installed in each interconnecting trunk cable. Where five cables form an IRS trunk, five galvanic isolators are required. Vision recommends that the V5-025 isolators are installed in the trunk cables where they enter the remote building and not at the headend where incorrect earthing is possible.

Voltage isolation means that any system equipment such as amplifiers, multiswitches and other active equipment must be powered from the local mains supply in each building. Line powering across a galvanic isolator is not possible.

