Survey waveforms could be negatively influenced where installed, due to the reactive elements within Solid-State-Decouplers. Should the survey waveforms be modified in any manner the survey could return false information deleterious to the structure under protection. It is general practise to isolate or remove the Solid-State-Decoupling devices from the structure to ensure that when applied waveform surveys are being conducted the survey waveforms are not influenced by the Solid-State-Decoupler reactive elements.

Removing the Solid-State-Decoupler or isolating the Decoupler from the structure under test solves the influence issue, but leaves the surveyor exposed to the very elements for which the Decoupler was designed to mitigate.

Cathetect have designed a Decoupler that can have reactive elements isolated (removed from circuit) on line whilst maintaining the protection levels the unit was designed to provide and hereby introduce the Solid-State-Decoupler with internal isolation, facilitating the removal/isolation of the reactive elements from affecting applied survey waveforms.

Available Versions

Three versions are available to suit the majority of applications generally found on pipelines and above ground storage tanks.
- * Internal isolation incorporated into the Decoupler without general access from the enclosure exterior, i.e. the enclosure lid needs to be removed to get to the isolator actuator handle. **General applications are hazardous locations and environments.**
- * Internal isolation incorporated into the Decoupler with access to the isolator actuator handle from outside the enclosure via a removable special key.
- * Internal isolation incorporated into the Decoupler with access to the isolator actuator handle from outside the enclosure via a pad-lockable shroud.

Features

- * The isolation device carries the same current rating capacity as the device to which it is fitted. (Option to be selected during order placement, to allow incorporation into the device at assembly.)
- * The isolation device is a double insulation device complete with switching ark diffusion chamber shrouding, venting the harmful flame and gasses away from the operator.
- * No handling of live hardware or exposure to arcing whilst operating the isolator. The operator actuated toggle is double insulated from the isolator components.
- * Available in a separate enclosure where 3rd party Decoupling devices or Decouplers have been installed prior to the isolation requirement being evident. (Isolator in this instance must be matched to the existing Decoupler fault current handling capacity.)

Rating and Enclosure Options

- * Isolation units are available in 2kA, 4kA, 5kA and 10kA.

The latter stand alone isolator is available in a rugged industrial IP68 enclosure that can be fitted to:

- * a surface
- * a kiosk, or
- * a pedestal
- * pole mount

(For pole mounting, the diameter of the pole to which the device is to be mounted is required at the time of ordering the pole mounting hardware.)