

# KFS SIL2\*: Signal Crossing Prevention System - (ATS - Automatic Train Stop)

Ongoing certification of the CERTIFER contract No. ECI1462

## KFSI Track Antenna

### INTEGRATED SIGNAL CROSSING PREVENTION

The analogical KFSI track antenna is an integrated autonomous device for electrical and thermal railway systems (train/urban subways/RER/tramway).

Its main function is to provide information on a crossing at a traffic signal (red light/green light). It is installed on a ballast between the tracks via the intermediary of an external chassis with anti-vibration resilience.

The electrical equipment attached to the traffic signal provides the track antenna with red light information (which is the same when there is no light) or green light information.

A permanent magnet creates a constant magnetic field. The presence of this magnetic field alone informs the onboard sensor and its treatment block that the track antenna, in other words the related traffic light (red light or no light), must not be crossed.

When the light is green, this magnetic field runs in parallel to the electro-magnetic emission of two F1 and F3 frequencies, informing the onboard sensor and its block of an authorization to pass.

Three track antennas are available:

- The KFS mp track antenna (anti-signal crossing prevention device for the Paris subway system) is a functional equivalent of the RPS permanent magnet track antenna used on the urban subway system in Paris.
- The KFS rp track antenna (anti-signal crossing prevention device for the Paris RER) is a functional equivalent of the RP electromagnet track antenna used on the RER system.
- The KFSI track antenna (integrated anti-signal crossing prevention device) is a functional equivalent of the RPS subway and RER track antennas, as well as their associated electronics.

*Reference*

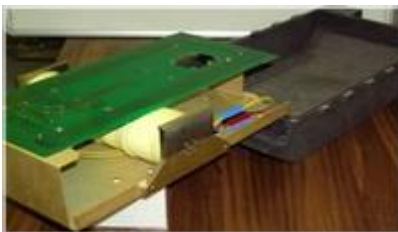
- Corse :
  - Number of copies: 70
  - Year Implemented: 2006



*KFS track antenna (inside view)*



*KFS mp permanent magnet track antenna*



*KFS rp electromagnet track antenna*



*KFSI track antenna (inside view)*



*KFSI track antenna (inside view)*



*KFSI track antenna*