Solution for frauds in cash dispensers

Example of frauds in the cash dispenser

Objective

- EBRAX GROUP possess Technology that can be applied to ATM cash dispensers against frauds:

  - Self Adjusting Optical Devices - SAOD

- These solution could be used in depositary module or dispenser module.
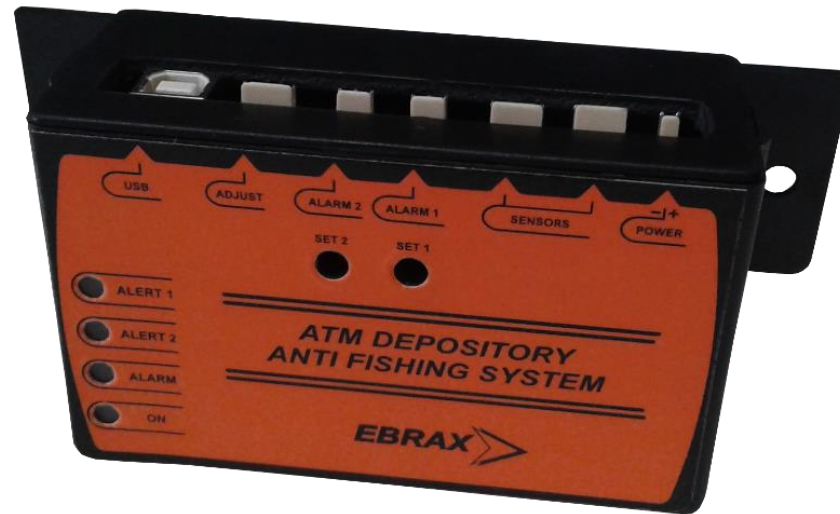
Self Adjusting Optical Devices Technology (SAOD)

SAOD - Features

✓ Monitors the presence of objects in the front área of the cash dispenser by using precision optical sensors;

✓ 1st Stage
  ✓ Detect changes in monitored areas and triggers <u>alert mode</u> when detection occurs;

✓ 2nd Stage
  ✓ If alert mode persists for a predefined amount of time, system triggers <u>alarm mode</u>;

✓ In alarm mode, the following actions are applied:
  ✓ Sound and visual sinalization
  ✓ Dry-contact activation, that can be used to lock the transaction, for example.

SAOD – Control Unit

✓ The control unit is responsible for processing the data between the optical sensors and the alarm board of the ATM, acting as an interface device.

SAOD – Optical Sensor

✓ The optical sensor is composed of an array of infrared LEDs and photodiodes. In this manner, it is possible to verify if there is any object in the monitored area.

SAOD - Advantages

- ✓ High Sensibility – It can detect low thickness objects like a dental floss – Commonly used in Latam;
- ✓ Self Adjustment function - Prevents false alarms related to dust acumulation or daily variation of temperature and luminosity;
- ✓ Customizable for diverse ATM brands (NCR, Diebold, Wincor, Oki, etc)
- ✓ Plug-and-play device – Most installation can be performed in field (no need of factory installation);
- ✓ Universal interface system – Can be connected to any alarm system by a dry-contact (Open/Closed);

SAOD – Sucess Case

✓ 16.000 devices installed in NCR ATMs;

✓ Bank Agencies reported a 95% reduction in complaints related to frauds in the depositary module;

✓ Bank Managers reported that any alarm triggered by the system is actually a fraud installed in the ATM (no false alarms reported);

✓ The bank agency employees directly remove the detected frauds and the ATM automatically returns to regular service status (minimizes ATM downtime).