FLIR Certified System Engineer (FCSE)

AUTOMATIC INCIDENT DETECTION & TRAFFIC DATA COLLECTION
WITH VIP-, TRAFIBOT- OR ITS SERIES AID

ITS TRAINING

1 GOALS

1.1 TOPIC

This training is about the FLIR ITS solutions for Automatic Incident Detection and Traffic Data Collection with FLIR ITS VIP-series, TrafiBot-series and ITS series AID, here after named as *-series.

1.2 GOAL

When you have completed this training you'll:

- Be able to explain, install, configure and maintain *-series on a fundamental level*.
- Have the knowledge and skills to successfully complete your AID and/ or Traffic Data project.

*A fundamental level:

- At this level, you'll be able install and configure 70% of all your installations successfully.

1.3 OBJECTIVES

When you have completed this training, you'll be able to:

1.3.1 General
- Explain the architecture and principles of video detection with visual and thermal sensors
- Describe benefits of visual and thermal imaging
- Explain the minimum requirements for a Visual and/ or Thermal Camera
- List the different applications FLIR ITS has to offer for

1.3.2 VIP-Series
- Describe the hardware features of the different VIP-series models
- Explain the differences between the different VIP-Series models
- Install and connect the VIP-series models

1.3.3 TrafiBot Series
- Describe the hardware features of the different VIP-series models
- Explain the differences between the different TrafiBot-Series models
- Install and connect the TrafiBot-series models

1.3.4   ITS Series AID
- Describe the hardware features of the different VIP-series models
- Install and connect the VIP-series models

1.3.5   Automatic Incident detection
- Describe ideal installation height and angle for AID
- Set-up the calibration for AID
- Configure on a basic level the *-series for Stopped Vehicle, Fallen Object, Pedestrian, LOS, Under speed, Over speed, Inverse direction, Camera Movement, Image Quality, Smoke, Fire
- Create back up and rich network that can be used by FLUX Traffic Management System.

1.3.6   Traffic Data Collection
- Describe the ideal installation height and angle for traffic data collection
- Calibrate the *-series
- Configure on a basic level the *-series for Flow data and integrated data collection
- Create back up and rich network that can be used by FLUX Traffic Management System.

1.4   AUDIENCE
This training is intended for Traffic Engineers, consultants, technical sales involved ITS projects requiring Automatic Incident Detection (AID) and Traffic Data Collection (TDC) on highways, bridges and in tunnels.

2 DAY 1

08:30   Welcome

- Coffee & Registration

09:00   Introduction

- FLIR ITS, the company
- The Solutions
- How does it work?

09:50   Break

10:00   Camera, the eye of the system – The perfect Camera

- Visible Camera
  - o   Lens
  - o   Camera housing
  - o   Video Transmission

10:30   Camera, the eye of the system – the perfect position

- For automatic incident detection
- For data collection
- For presence detection
- For monitoring

10:50   Break

11:00   Hardware *-series

- Board
- Rack
- Box
- Camera

12:00   Functionalities *-series

- AID
- Traffic Data

12:30   Lunch Break

13:30   TCT, Traficon Configuration Tool

- Install TCT
- Configure Network
- Calibration of *-series Board

14:15   Break

14:30   Basic configuration of *-series for Traffic Data functionality

- How to draw a Traffic data zone
    - Hands-on
- Tips & Tricks on a good working zone

15:30   Break

15:45   Basic configuration of *-series for Inverse Direction functionality

- How to draw a Data zone
    - Hands-on
- Tips & Tricks on a good working zone

16:15   Basis configuration of *-series for Under speed functionality

- How to draw a Data zone
    - Hands-on
- Tips & Tricks on a good working zone

17:00   End

3 DAY 2:

09:00 Recap yesterday

- Calibration
- Detection zones

09:30 Basic configuration of *-series for Stopped Vehicle functionality

- How to draw a Stopped vehicle zone
  - o Hands-on
- Tips & Tricks for a good working zone

10:15 Break

10:30 Basic configuration of *-series for Smoke, Image Quality, Camera movement

- How to draw a zone
- Tips & Tricks for a good working zone

11:00 Break

11:15 Recap Exercise: Configure *-series board:

- Calibration
- Pedestrian and Fallen Object
- Smoke and image quality detection

12:30 Lunch

13:30 Maintenance:

- Back up
- Work offline
- Replace hardware

14:30 Break

14:45 Work with multiple configurations

15:45 Break

16:00 Introduction into FLUX

- Architecture
- Features

17:00 End

4 REQUIREMENTS

4.1 CLASSROOM:

The classroom should have the following:

- Whiteboard and/or Flipchart
- Projector or big screen
    - To connect trainer's laptop on
    - VGA connection (if HDMI adaptor to VGA)
- Table and chair for every participant
  Enough power outlets for laptops & equipment

4.2 STUDENTS:

The students should:
Have:

- a laptop
    - on which they can install software
    - if they cannot install software we can send it before so admin can install it for them.

Know:
- basic pc skills

4.3 *-SERIES

Ideal is to have for every student a *-series board/ camera. If that is not possible ITS Training can always ship.

! Be aware of shipping times, customs, …

5 CONTACT DETAILS:

5.1 TRAINER

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5.2 CONTACT

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