

Insight Camera Frequently asked Questions

Installation/Setup

1. What is the max distance between the camera head and control unit

- a. 10m (32.8ft) – must use provided shielded cat6 cable from camera head to the control board.
- b. Note: shielded cat6 from camera head to control box passes raw video only back to the control unit. No IP to the camera head

2. What cabling is required from the camera head to the control unit?

- a. We provide a 10m (32.8ft) shielded CAT6 cable. We do not recommend using third-party cables between the control unit and camera module.
- b. The provided cable should not be shortened or re-terminated.

3. What height does the camera head need to be mounted?

- a. 1.6m (62in.) – this is optimal height for recognizing all heights, including tall persons and persons in a wheelchair.
- b. This height is above the standard card reader height, but the camera head contains no operable parts (no physical keypad, duress or call buttons to reach).

4. How does the camera head receive power?

- a. The camera head receives power over the provided, shielded CAT6 cable.

5. What is required to power the camera?

- a. The unit requires high-power Power over Ethernet (PoE) 802.3bt Type 3 Class 5 (60W).

6. Can unit be powered by external power source other than PoE?

- a. Planned for subsequent release.

7. Is the camera head the only component?

- a. No – camera consists of a camera head and a camera control unit which can be mounted up to 10m away, (using the provided 10m CAT6 shielded cable) in a secure location, e.g. – above ceiling or wall mounted.
- b. Camera head consists of Image sensors, visible and IR LED's, speaker and microphone . The camera control unit (typically placed in the ceiling) contains the camera intelligence.
- c. Important to note that there is no physical IP to the door so if someone takes the camera head off the wall they cannot connect into your network. Only raw video is passed from camera head to the camera control unit.

8. Are there tamper detection switches on the back or door of the Insight Control Unit?

- a. There is a tamper switch on the door of the control box but none on the back. This tamper will be monitored through an input on the access control controller.
- b. Camera head tamper will be indicated by a loss of video alarm.

9. Can the Insight be used outdoors?

- a. The initial hardware release is for indoor use. An outdoor version is on the roadmap

10. Can the Tyco AI software run on my access control server?

- a. No. Separate hardware should be used to run the Tyco AI server. Please refer to our documentation for minimum recommendations.

Performance

11. Why are there two camera lenses on the camera module?

- a. This is required for liveliness detection.
- b. One is an RGB lens and the other is an infrared (IR) lens.

12. Does the Insight also provide video output for recording on an NVR?

- a. The Insight sends an RTSP video stream on the network. This can be recorded similar to other IP cameras by your VMS software.
- b. Record only iAPI support coming soon

13. What are the best configuration settings for recording video on my NVR?

- a. Like any IP camera it depends on what you want to capture. Do you intend to record on motion or continuously? Do you wish to record on the trigger of an unrecognized face? How many days of video retention are desired, and so on. This is user or environmentally dependent.
- b. 10 fps (frames per second) is the minimum frame rate for access control, 15 fps is recommended.

14. Can I use the Insight for dual authentication?

- a. This depends on your access control system. Please check how, or if, your access control system supports dual authentication.

15. Is the facial algorithm used by Insight certified by NIST?

- a. Not at present. We have benchmarked against NEC and are moving towards NIST testing.

16. If I exceed 16 video streams and need a second Tyco AI server, is the same database used?

- a. Yes, this is handled by the access control system and can be pushed to multiple Tyco AI servers.
- b. If using a third-party access control, without integrated enrollment, you would need to enroll the users on each Tyco AI server. (Bulk enrollment option planned for subsequent release).

17. Does the camera have a button to initiate a call?

- a. There are no buttons on the camera head.
- b. SIP supported in subsequent release.
- c. A security guard or receptionist could initiate a call to the camera module. You may also utilize the text-to-speech function of the camera to prompt an unknown person or denied person what steps to take or where to go for assistance.
- d. SIP features are dependent on the security system platform's support of SIP.

18. How does the device perform in low lighting?

- a. Software will auto adjust to brighten the image of the face for better detection.

19. Will someone covering or trying to hide their face generate an alarm?

- a. No, currently we are only detecting faces.

20. Is mask detection possible with Insight?

- a. Mask detection is on the roadmap for Tyco AI and integration with Victor and ExacqVision.

21. Does the Tyco AI server offer redundancy? What if the Tyco AI server is offline?

- a. The Tyco AI system must be online for facial recognition use with the Insight camera.
- b. A redundancy solution is planned for later release.

Functionality

22. How do we enroll?

- a. Personnel can be enrolled in 2 ways:
- b. Via the Tyco AI server web interface– used if access control integration is not released.
- c. Via the access control system – User is enrolled via the access control system, personnel will then be pushed from access control system, a biometric is generated and stored on the Tyco AI server.
 - I. CEM AC2000 version 10.3
 - II. Software House C-CURE 9000 version 2.8 SP2 driver
 - III. Kantech Entrypass Corporate and Global Edition

23. What type of images do I need to enroll?

- a. iPhone images are suitable.
- b. System requires at least 1 image to be uploaded, however we recommend 5 images are uploaded for optimal recognition.
- c. 45 degrees up, 45 degrees down, 45 degrees left, 45 degrees right and straight on
- d. Selfies are not recommended.

24. What is the minimum resolution of enrolment images?

- a. The head should be most of the enrollment and image.
- b. Images should have a minimum resolution of 800x600 pixels.
- c. The quality of the enrolment images is very important. It should include proper lighting, no motion blur and preferably white background.

25. How are the images stored?

- a. When enrolled via the access control system -> Images are stored on the access control system and during enrollment a biometric template is generated and stored on the Tyco AI server. The images are not stored on the Tyco AI server. They are only stored on the access control system.
- b. When enrolled via the Tyco AI Server -> Images are stored on the Tyco AI server ONLY when they are enrolled via the web, these images are encrypted

26. How far can it detect and recognize from?

- a. The camera begins detecting faces at a distance of 3-4m (10-12 ft.) and continues to process those faces as users approach.

27. What is the minimum FPS that you need for facial recognition?

- a. 10 would be the minimum for access control, 15 is recommended.

28. Are there are requirements / limitations for live recognition?

- a. The only hard limitation is that the head will be larger than 10% of the image.

29. What factors are available for multifactor authentication?

- a. . Any method supported by your access control software.
- b. Rules for being granted or denied access are defined by your access control software.

30. Can Insight be connected to an intercom?

- a. If it utilizes the SIP protocol, yes.

31. What access control systems does this integrate with?

- a. The device is designed to be access control agnostic using Wiegand and OSDP terminal output to the access control panel.
- b. We are working to integrate user and facial enrollment into CEM, C-CURE 9000 and Kantech. This means if you use a third-party access control system without integrated enrollment you will need to enroll users separately in the Tyco AI GUI on each Tyco AI server.

32. What protocols are supported?

- a. Wiegand and OSDP for access control.
- b. RTSP for video.

33. Bandwidth requirements

- a. The only bandwidth requirements relate to the CCTV stream that you pull from the camera... e.g. you can pull a 20 fps RTSP stream. In this respect it acts the same as a 2MP fixed camera

34. How do we handle tailgating?

- a. Tailgating will be handled by the access control system in a subsequent release.

35. What happens if someone grows a long beard?

- a. It depends on how much the person's appearance changed. We have found that persons enrolled with a beard were recognized when shaved off.
- b. If their appearance changes dramatically from when they were enrolled, we recommend uploading a few new images. Similar to a lost access card scenario, but only necessary with dramatic changes.

36. Does it work with people wearing glasses?

- a. We recommend uploading images with and without eyeglasses or reading glasses.
- b. Sunglasses can reduce recognition speed.

37. How can I provide a QR code to users?

- a. QR codes are intended for visitor management and generated via the visitor management system in later releases.

38. Will the camera work for very tall people or those in wheelchairs?

- a. The recommended mounting height is 1.6m (62in.) from floor to lenses for best results.
- b. A wide field of view allows it to work equally well for tall users as well as those in wheelchairs.

39. Suitable for turnstiles?

- a. Yes
- b. Closest face only detection for Turnstile mode.
- c. Up to 3 Configurable field of view zones for turnstile scenarios and turnstile deployment.
- d. Turnstile specific mounting under development.

40. Is there a Software Support Agreement (SSA) available for this product?

- a. After the first year an SSA may be purchased to continue software updates and support for video channel used.
- b. If you have two Insight cameras and a standard dome camera used for facial recognition on a Tyco AI system, this equals 3x channels.
- c. The SSA is for Tyco AI channels, there is no SSA on the Insight itself. However, if you are recording to an NVR a license fee could apply.