



A pan-tilt-zoom camera ( PTZ camera ) is a camera that is capable of remote directional and zoom control. Pan-tilt-zoom cameras can be an essential part of modern surveillance systems, almost all firms integrate them in the radio and radar based sensors. Users typically require a visual picture of the target to take further action. One method of surveillance with such cameras is based on master cameras monitoring a wide area that provide information so when a drone is detected by radars or RF sensors, the PTZ camera can zoom into its direction for a controller to acquire an image and report details. (for instance, British SkyPatriot company, CEO Garik Markarian uses such a configuration as standalone system without incorporating other sensors).

Range up to 1 km that is less than IRIS radar (pattern recognition distance 1.4 km, to be enlarged to 2 km).

Details can be found here:

[https://en.wikipedia.org/wiki/Pan-tilt-zoom\\_camera](https://en.wikipedia.org/wiki/Pan-tilt-zoom_camera)

One of the cameras used by Dedrone is the following:

PTZ camera with normal range

AXIS Q6215-LE PTZ Network Camera

Heavy-duty PTZ camera with Optimized IR

- Range for drones: up to 1 km (0.6 mi)
- Night vision (IR LED) up to 400 m (0.25 mi)
- Zoom: 30x optical
- Resolution: 1080p
  
- HDTV 1080p and 30x optical zoom
- Long-range Optimized IR (400 m/ 1300 ft range)
- 1/2" sensor for high dynamic range
- MIL-STD-810G and NEMA TS-2 compliant
- AXIS Guard Suite analytics included
- Amazon price 3500\$

Links:

<https://www.axis.com/products/axis-q6215-le/>

<https://www.amazon.com/01442-004-AXIS-Q6215-Network-Camera/dp/B089S7RYLY>

This video demonstrates the rotation and tilting of the PTZ camera

<https://youtu.be/pcjLOSJclnc>

It can be found on the product page of AXIS Q6215-LE PTZ Network Camera  
<https://www.axis.com/products/axis-q6215-le/>

All mechanical parts which allow pan, tilt, and zoom are built-in.

Additional info on PTZ camera :

<https://www.videosurveillance.com/tech/ptz-cameras.asp#:~:text=How%20PTZ%20Cameras%20Work,to%20on%20a%20set%20schedule.>