



Embedded LPR Bill of Materials

IPConfigure developed the first commercially available embedded License Plate Recognition application for IP cameras. Supporting Axis ACAP cameras equipped with ARTPEC-4 processors, eLPR is capable of independently detecting, reading, and recording license plates internally within the camera. This document outlines both required and recommended.

Software Materials

IPConfigure LPR Software

- **Part#: IPC-LPR-EMB**
 - Single Camera Embedded License Plate Recognition (eLPR) software license
 - One year of support, and upgrades.

Hardware Materials

Compatible IP Cameras

- **Model: Axis Q1765-LE**
 - **LPR read distance:** 10 to 20ft
 - **Lens:** included with 18x Optical Zoom & Focus
 - **Enclosure:** included with outdoor P66- and NEMA 4X-rated
 - **IR Illumination:** Optional, see below.
 - **SD Card:** SanDisk 32 or 64GB Extreme, Extreme Plus, or Extreme Pro cards
 - **Firmware:** 5.60 or older

*** Axis End-of-Life Cameras ***

- **Models: Axis Q3505-V/-VE 22 mm**
 - **LPR read distance:** 10 to 15ft
 - **Lens:** Included 9 - 22 mm, 33° - 16°, F1.6
 - **Enclosure:** included with outdoor EMA 4X-rated, IK10+
 - **IR Illumination:** Optional, see below.
 - **SD Card:** SanDisk 32 or 64GB Extreme, Extreme Plus, or Extreme Pro cards
 - **Firmware:** 5.60 or older
- **Models: Axis P1353, P1354, P1355, P1357**
 - **LPR read distance:** 10ft - 75ft
 - **Min CS-mount Lens:** 10ft - 50ft, Fujinon 5-50mm lens PN# YV10x5HR4A-SA2L
 - **Max CS-mount Lens:** 0ft - 75 feet, Fujinon 8-80 lens PN# DV10x8SR4A-SA1L & CS Adapter Ring
 - **Enclosure:** AXIS T93F20 - IP66- and NEMA 4X-rated (Not included)
 - **IR Illumination:** Optional, see below.
 - **SD Card:** SanDisk 32 or 64GB Extreme, Extreme Plus, or Extreme Pro cards
 - **Firmware:** 5.60 or older
- **Models: Axis Q1602, Q1604, Q1614, Q1615, Q1635**
 - **LPR read distance:** 10 to 75ft
 - **Min CS-mount Lens:** 10ft - 50ft, Fujinon 5-50mm lens PN# YV10x5HR4A-SA2L
 - **Max CS-mount Lens:** 0ft - 75 feet, Fujinon 8-80 lens PN# DV10x8SR4A-SA1L & CS Adapter Ring
 - **Enclosure:** AXIS T93F20 - IP66- and NEMA 4X-rated (Not Included)
 - **IR Illumination:** Optional, see below.
 - **SD Card:** SanDisk 32 or 64GB Extreme, Extreme Plus, or Extreme Pro cards
 - **Firmware:** 5.60 or older

Lens Options

Stock lenses under 15mm are inadequate for LPR applications. Lenses must be IR corrected, and of megapixel quality. NOTE: Depending on the camera and lens combination, a C to CS mount adapter ring may be required between the camera and lens. While there are many brands and models of lenses IPConfigure has tested and certified the following:

- **Models: Fujinon 5-50mm YV10x5HR4A-SA2L**
 - **Wide Aperture:** f/1.6
 - **Focal Length:** 5-50mm / 10x Zoom
 - **Lens type:** CS Lens Mount (Metal)
 - **Zoom:** Manual
 - **Focus:** DC Auto iris

- **Models: Fujinon 8-80 lens DV10x8SR4A-SA1L**
 - **Wide Aperture:** f/1.6
 - **Focal Length:** 8-80mm / 10x Zoom
 - **Lens type:** C Lens Mount (Metal)
 - **Zoom:** Manual
 - **Focus:** DC Auto iris

Outdoor Enclosure

The enclosure for the Axis P13 and Q16 series cameras requires enough internal room for the camera and lens combination. The Axis -E series cameras offered with the P13 and Q16 series cameras with an enclosure included do not accommodate the lenses required for LPR. For the recommended cameras and lenses in this document, an enclosure must accommodate a camera and lens combination of 9.5"L x 3.25"W x 2.7"H. Please contact Axis communications, or your enclosure manufacturer to ensure the camera and lens combination will fit inside your enclosure. IPConfigure has tested and certified the following:

- **Models: Axis T93F20**
 - **Outdoor certificate:** IP66- and NEMA 4X-rated

IR/Night Illuminator

Infrared illuminators vary in maximum distances. While there are many brands and models of infrared illuminators available IPConfigure has tested and certified the following:

- **Models: Axis T90B30**
 - **Distance:** short range up to 15ft
 - **Power:** 12-24v AC/DC

- **Models: Axis T90B40**
 - **Distance:** short range up to 40ft
 - **Power:** 12-24v AC/DC

- **Models: Raytec Raymax 200**
 - **Distance:** short range up to 70ft
 - **Power:** Universal 100-230V AC auto-sensing