



This weatherproof camera module comes in a nice metal case with a mounting hinge, a 1 meter long cable with the TTL & NTSC signals brought out, and it has an automatic IR LED system for night time photos. When the on-board photocell detects that it is too dark for the camera to take a photo, it turns on a ring of 12 IR LEDs that illuminate the nearby area for night-vision shots.

This camera was designed to be used in security systems and does two main things – it outputs NTSC video and can take snapshots of that video and transmit them over the TTL serial link. You can snap pictures at 640x480, 320x240 or 160x120 and they're pre-compressed JPEG images which makes them nice and small and easy to store on an SD card. Perfect for a data-logging, security, or photography project.

One nice thing about this particular camera is all the 'extras' that come with it. For example it has manually adjustable focus, auto-white-balance, auto-brightness and auto-contrast taken care of for you as well as motion detection built in! That means you can have it alert your project when something moved in the frame.

Using the module is pretty easy and only requires two digital pins (or a TTL serial port) – by default it transmits at 38400 baud.

Technical Details

- Metal Housing size: 2" x 2" x 2.5"
- Weight: 150 grams
- Image sensor: CMOS 1/4 inch
- CMOS Pixels: 30M
- Pixel size: 5.6um*5.6um
- Output format: Standard JPEG/M-JPEG
- White balance: Automatic
- Exposure: Automatic
- Gain: Automatic
- Shutter: Electronic rolling shutter
- SNR: 45DB
- Dynamic Range: 60DB
- Max analogue gain: 16DB
- Frame speed: 640*480 30fps
- Scan mode: Progressive scan
- Viewing angle: 60 degrees
- Monitoring distance: 10 meters, maximum 15meters (adjustable)
- Image size: VGA (640*480), QVGA (320*240), QQVGA (160*120)
- Baud rate: Default 38400, Maximum 115200
- Current draw: 75mA without IR LEDs on. 250mA extra for IR LEDs
- Operating voltage: DC +5V
- Communication: 3.3V TTL (Three wire TX, RX, GND)