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Perth: +61 (08) 9242 5411

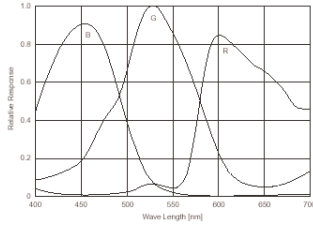
Sydney: +61 (02) 9979 2599

Melbourne: +61 (03) 9555 5621

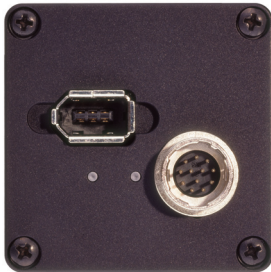
Email: [adept@adept.net.au](mailto:adept@adept.net.au)

Web: <http://www.adept.net.au>

# AVT Oscar F-510C



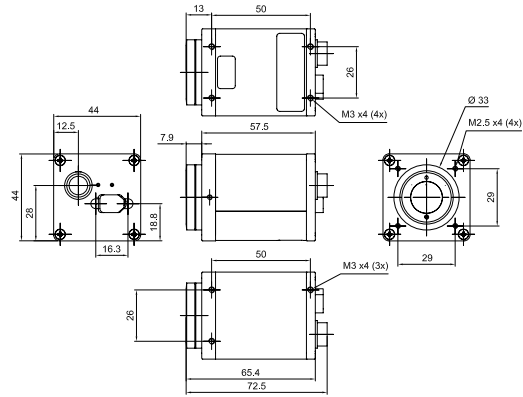
Sensor specifications (extracted from the data sheet of the sensor - excluding lens and filter)



Connections

| Pin | Signal                              |
|-----|-------------------------------------|
| 1   | External GND (RS232 and ext. power) |
| 2   | External Power (8...36 V DC)        |
| 3   |                                     |
| 4   | GP Input 1 (Default: Trigger)       |
| 5   |                                     |
| 6   | GP Output 1 (Default: IntEva)       |
| 7   | GP Input GND                        |
| 8   | RxD (RS-232)                        |
| 9   | TxD (RS-232)                        |
| 10  | GP Output Power                     |
| 11  | GP Input 2 (TTL)                    |
| 12  | GP Output 2                         |

| Preview mode (by sub-sampling): |           |
|---------------------------------|-----------|
| 1288 x 978                      | 7.5 fps   |
| AOI:                            |           |
| 2588 x 1958                     | 3.8 fps   |
| 1600 x 1200                     | 6.0 fps   |
| 1280 x 960                      | 7.4 fps   |
| 800 x 600                       | 11.4 fps  |
| 640 x 480                       | 13.8. fps |
| 320 x 240                       | 24.0 fps  |



Dimensions

## Camera Specifications

|                            |   |
|----------------------------|---|
| Image device               | Type 2/3 (diag. 11 mm) Sony CCD frame readout (ICX-282AQ)   |
| Effective picture elements | 2588 (H) x 1958 (V)   |
| Cell size                  | 3.4 µm x 3.4 µm   |
| Resolution depth           | 12-bit / up to 16-bit in High SNR mode  |
| Lens mount                 | C-Mount   |
| Color modes                | Mono8; Y8-green, Y8-red, Y8-blue; RAW8/16; RGB8; YUV 4:2:2; YUV 4:1:1   |
| Digital interface          | IEEE 1394a; IDC V1.3  |
| Transfer rate              | 100 Mbit/s, 200 Mbit/s, 400 Mbit/s  |
| Frame rates                | Up to 7.5 fps in Format_1 and 2; up to 3.8 fps in Format_7 frame readout; up to 7.5 fps in Format_7 progressive   |
| Image memory (FIFO)        | 32 MB, optional up to 256 MB  |
| Gain control               | Manual, 0 ... 20 dB (0.035 dB/step); auto gain (select. AOI)  |
| Shutter speed              | 20 µs ... ~67 s; auto shutter (select AOI)  |
| External trigger shutter   | Trigger_Mode_0, Trigger_Mode_1 (prog. scan, F_7 M_0); advanced feature: Trigger_Mode_15 (bulk); image transfer by command; trigger delay  |
| Smart features             | Real-time shading correction, color correction, High SNR mode (image summation); two configurable inputs, two configurable outputs, image mirror (L-R<->R-L), sub-sampling, binning, serial port IIDC V1.31 |
| Power requirements         | DC 8 V ... 36 V via IEEE 1394 cable or 12-pin HIROSE  |
| Power consumption          | 3.6 watt (@12 V DC)   |
| Dimensions                 | 72.5 mm x 44 mm x 44 mm (L x W x H); w/o tripod and lens  |
| Mass                       | 170 g (without lens)  |
| Operating temperature      | +5 ... +45 ° Celsius  |
| Storage temperature        | -10 ... +60 ° Celsius   |
| Regulations                | EN 55022, EN 61000, EN 55024, FCC Class B; DIN ISO 9022, RoHS (2002/95/EC)  |
| Options                    | Removable IR cut filter, host adapter, locking IEEE 1394 cable, AVT FirePackage/Direct FirePackage/Fire4Linux   |