

# Product Information

## Cameras

### 1/2" High End Colour Camera Series CCD-FS-2000EX with 480 TV Lines and EXview HAD CCD Chip

#### Product Data

- EXview HAD CCD chip
- 0.0136 lux at the faceplate (colour)
- 0.0034 lux at the faceplate (mono)
- 480 TV lines resolution
- automatic colour / mono switching
- backlight function
- auto shutter up to 1/100,000 sec.
- remote parameterisation via coax cable or RS232 via optional programmer unit
- line-lock synchronisation



#### Description

The CCD-FS-2000EX series is part of a complete videotronic infosystems 1/2" High End CCD camera line. The cameras use the high quality 1/2" EXview CCD chip and produce good video pictures even under extremely bad lighting conditions. They allow for an automatic switching between colour and mono, the switching threshold is freely adjustable.

Due to their high sensitivity to light of 0.0136 lux (colour) and 0.0034 lux (mono) at the faceplate these cameras produce crystal clear, sharp video pictures anytime. The colour cameras have a horizontal resolution of 480 TV lines and include different useful options. They are available with 12 VDC (CCD-FS-2012EX) or 230 VAC (CCD-FS-2230EX) power supply and include an adjustable line-lock (mains phase) synchronisation (300°).

The cameras can be remotely controlled and set up via coaxial cable or RS232 using an optional programmer unit. Moreover, all camera parameters can be set at the rear side of the camera via push buttons (and on-screen menu).

A rugged metal case with industrial design protects the camera against active and passive interference. The CCD-FS-2000EX series includes a real backlight function eliminating picture distortions caused by background or peak lights. A manual electronic shutter can be adjusted in 10 steps to adjust the camera to the individual scene illumination. The included C mount adapter makes the camera suitable for any lens type (1/2"). The integrated high speed auto shutter allows to optimally adopt the camera to the local lighting conditions.

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## Technical Specifications

<b>Max. pixels at video output</b>	568,000
<b>Net pixels on chip</b>	440,000
<b>Resolution at 625 lines</b>	480 lines
<b>Sensitivity to light</b>	0.034 lux / F1.4 b/w 0.136 lux / F1.4 colour
<b>Sensor</b>	1/2" HQ Interline Transfer CCD
<b>Remote-configuration</b>	via coax-cable
<b>Onscreen Display</b>	yes
<b>Enhancer (H-Aperture)</b>	yes
<b>Gamma correction</b>	0.45
<b>Auto Shutter</b>	1/50 – 1/100,000
<b>Signal-to-noise ratio</b>	> 50 dB
<b>AGC / ALC</b>	18 dB / 72 dB
<b>Synchronisation</b>	linelock
<b>Backlight</b>	yes
<b>Spectral response</b>	380 – 660 nm
<b>Smear</b>	< 0.004%
<b>Depth of modulation</b>	80%
<b>Return loss</b>	> 22 dB
<b>Automatic circuits for</b>	
Gain / Pedestal	yes
<b>Video output signal</b>	FBAS 1 V <sub>pp</sub> / 75 Ω
<b>Y/C-output</b>	yes
<b>Scanning system</b>	PAL
<b>Operating voltage / Consumption</b>	CCD-FS-2012EX=12 V/DC / 5 W, CCD-FS-2230EX=230 V/AC / 6 W
<b>Ambient temperature</b>	-10° up to +50° C.
<b>Air humidity</b>	max. 90%
<b>IP rating acc. to VDE</b>	IP40 / cl. I bzw. III
<b>MTBF</b>	80,000 hours
<b>EMI</b>	acc. to EMVG
<b>EMC</b>	acc. to EMVG
<b>Lens mount</b>	C- / CS mount
<b>Housing color</b>	RAL 7035
<b>Connections via</b>	BNC, terminal block, mains cord
<b>Y/C</b>	Mini DIN 4 pole
<b>Dimensions (W x H x D)</b>	65 x 65 x 135 mm

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