



CS 3950DF

Monochrome progressive scan IEEE 1394 camera
with 1/3" Sensor

Among a wide range of developments latest monochrome machine vision camera CS3950DF, manufactured by TELI (Tokyo Electronic Industry Co., Ltd.) captivates the user by its technical possibilities.

The 1/3" Progressive Scan CCD image sensor offers 790.000 active pixel at a cell seize of $4.65\mu\text{m}$ (H) x $4.65\mu\text{m}$ (V). The active image area is 5.80mm (H) x 4.92mm (V).

CS 3950DF achieves a frame rate of 30fps at XGA resolution (1024(H) x 768(V) pixel). The data readout and all camera settings are done via IEEE1394 interface. By using the scalable mode function (setting 1 window of interest) the frame rate can be increased. In scalable mode function the total image is divided in 1024 rectangle fields (32H x 32V). One field has 32x24 pixels. The WOI are defined by the for edge points of a rectangle.

The camera offers 3 different shutter modes. The fixed shutter mode reaching in 8 steps from 1/100 sec. to 1/20.000 sec and the pulse width mode (RTS-mode). The mentioned above trigger modes use the format_1 mode_5 at 1024 x 768 Mono 8 bit. The 32bit floating point format mode is used if the camera works in scalable mode and offers shutter times from 10 μsec . up to 2 sec. When using the 32bit floating point mode the data format is format_7 mode_0.