BILLECTRON

FPU-4A, FPU-4P SOLAR-BLIND PHOTODETECTORS

Digital high sensitive FPU-4A and FPU-4P are intended for optical image conversion in UV spectral range into TV signal in wide irradiation diapason at input.

FPU image sensor includes two stage amplifier based on two intensifiers of 2+ generation, coupled through direct fiber-optical contact with special frame transfer largeformat array. A combined bandpass filter was used to block visible spectral range. In FPU-4P the capability of sampling by gate of input intensifier is realized. Gain control is fulfilled by gain change of two intensifiers.



FPU-4 operates in different modes with automatic and manual amplification control.

FPU is supported by interface USB 2.0 for OC Windows 7,8.

Operating irradiation range at FPU input is from 10^{-12} to 10^{-6} W/cm².

SPECIFICATIONS

	FPU-4A	FPU-4P
Spectral response, nm	230 ÷ 310	230 ÷ 310
Output signal at operating irradiation $5x10^{-9}$ W/cm ² and λ =280 nm, mV	> 100	> 100
S/N ratio at operating irradiation	> 10	> 10
Spectral sensitivity at λ =280 nm, V·cm ² /W	> 2x10 ⁷	> 2x10 ⁷
Threshold irradiation at λ -280 nm, W/cm ²	< 5x10 ⁻¹⁰	< 5x10 ⁻¹⁰
Dark signal, mV/s	< 100	< 100
Number of pixels	1024x1024	768x580(290)
Sampling mode, ns	≥10	-
Supply voltage, V	27±1	27±1



SPECTRAL RESPONSE CHARACTERISTIC



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