



# HDPYX 300-C

**3 MP, Global or Rolling Shutter, High sensitivity  
HDR 120dB CMOS image sensor**



HDPYX300-C is a very high dynamic range image sensor with high sensitivity. This sensor can operate in different Global or Rolling shutter modes and offers a high dynamic range in both FSI and BSI technologies.



## APPLICATIONS

- Instrumentation
- Scientific applications
- NewSpace



## MAIN CHARACTERISTICS

- Resolution 3 MP
- Active Pixels 2800 x 1088
- Aspect Ratio 2.5 : 1
- Frame Rate 10 fps (@20bits, Full resolution)
- Optical Diagonal 30.04 mm



## KEY FEATURES

- 10µm pixel pitch (6T structure)
- Shutter modes:
  - Electronic Rolling Shutter with CDS (ERS)
  - Global Shutter Low-Noise with CQS (GSLN)
  - Global Shutter with UDS (GS)
  - Global Start Rolling Shutter (GRS)
- 14 bits ADC
- Output format:
  - 20 x CMOS data output
  - Up to 20bits data output
- Ceramic package, µPGA, 77 Pins (pin out compatibility between FSI and BSI versions)
- Monochrome



## PERFORMANCES

- Very High Dynamic Range up to 120 dB (dual gain) on-chip
- Readout noise 2.6 e-
- Very high Full Well Capacity > 100 ke-
- QE >60% (FSI), 80% (BSI) @550nm
- Dark Current < 6e-/s/pixel at 20°C

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