

# Norite series

## N-5A100

Preliminary



CoaXPress

### Key characteristics

5 Mpx  
4.8  $\mu\text{m}^2$

2592  
x  
2048

105+  
fps

CMOS  
Global  
Shutter

1 inch  
Optical  
format

< 4 W

<29 mm<sup>2</sup>

56 g

60 dB  
DNR

- 5 Megapixel at 105+ fps
- OnSemi PYTHON5k sensor
- True Global Shutter CMOS
- Monochrome only
- Size 29 x 29 x 45 mm
- Dark and bright uniformity corrections
- CXP3/5/6 BNC 1 configurable
- Trigger over CoaXPress
- CoaXPress V1.1.1

### Description

The Norite N-5A100 camera is a 5 megapixel camera with CMOS global shutter technology in a 1" optical format. For developers of multi-camera systems, such as side-view cameras for 3D metrology, the N-5A100 cameras offer reduced system complexity while increasing throughput.

The frame rate of the N-5A100 cameras is such that it can match with the higher resolution top-view camera, to provide the synchronized acquisition of all cameras to maximize system throughput. By using programmable region of interest the frame rate can be further increased or used to optimize system cost.

The small camera outline enables a compact detection head outline and ensures full mobility in the system. The flexible cables and reduced number of cables via the CoaXPress interface further enhances movability while lowering cabling costs and EMC risks.

The Norite N-5A100 cameras are designed to work together to simplify easy integration on system level and control the entire camera system through one user interface. Multi-camera systems using N-5A100 cameras eliminate the constraints with Camera Link- and USB 3.0 Vision-based systems.

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# 5 Megapixel High Speed Compact Camera

## Specifications (target)

N-5A100	
Sensor	On Semiconductor CMOS Python5k
Pixel size	4.8 $\mu\text{m}$ x 4.8 $\mu\text{m}$ with micro lenses
Resolution	2592 (H) x 2048 (V)
Optical format	1"
Video Output	CoaXPress - V1.1.1 CXP3, CXP5 or CXP6
Max frame rate (8bit 1x CXP6)	105 fps
Dynamic range	60 dB linear
Full Well*	10 ke (max)
Electronics shutter	Global shutter 7T
Image acquisition	Continuous / Controlled
Output resolution	8 / 10 Bit
Monochrome / Color	Monochrome
Power input	24 Vdc PoCXP
Power usage	< 4 W
Weight	60 g (including lensmount)
Lens mount	C-mount
Compliance	CE, ROHS

\* specification OnSemi

## Functionality

Defect pixel correction

ROI

Image flip

Frame counter

LUT

Digital fine gain (1x to 32x)

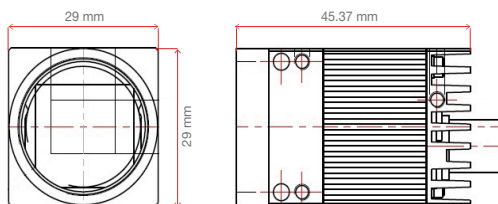
Automatic black level control

PRNU and DSNU calibrations

Non-volatile calibration data storage

Trigger over CXP

## Dimensions



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