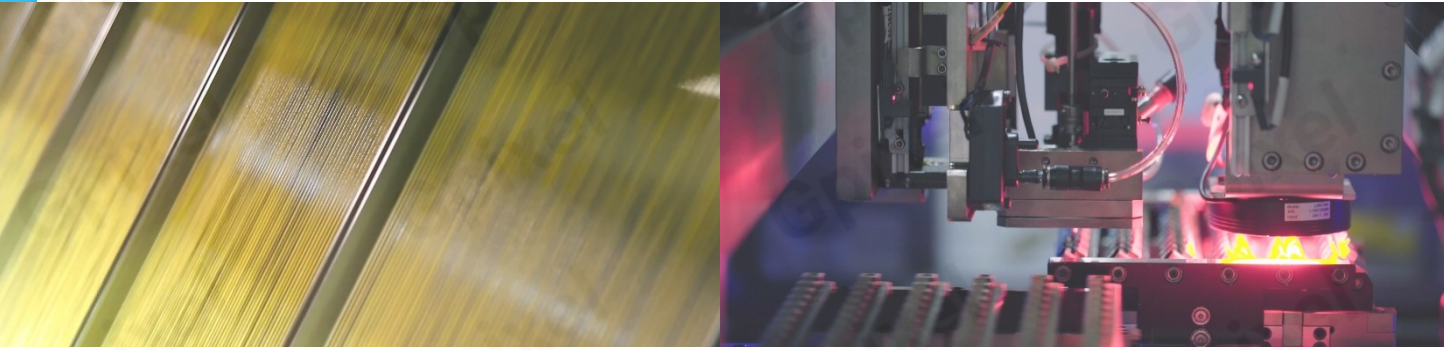
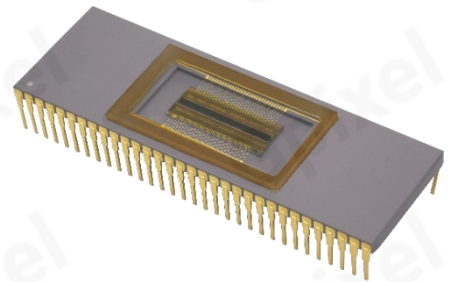


GIR2505 Product Flyer



512 x 2 InGaAs line scan sensor

GIR2505 is a 512 x 2 InGaAs line scan image sensor with 25 μm square global shutter pixel. The sensor integrates a 12-bit ADC and provides 70 dB of dynamic range. Both high-gain (HG) and low-gain (LG) modes are supported. In LG mode, **GIR2505** has a maximum full well capacity of 1.6 Me^- with readout noise of 450 e^- . In HG mode, the maximum full well capacity is 85 ke^- with readout noise of 116 e^- . It utilizes 2 pairs of Sub-LVDS interfaces with a maximum data rate of 1.68 Gbps, for a maximum line frequency of 40.4 kHz. **GIR2505** also consumes less than 450 mW at the highest line frequency and is packaged in a 64-pin DIP with a package size of 57.4 x 18.9 mm.



Key Features

- Pixel size : 25 μm x 25 μm
- Resolution: 512(H) x 2(V)
- Sub-LVDS output format
- On-chip 12bit ADC with dynamic range of 70 dB
- Line rate up to 40.4kHz

Applications

- Industrial Inspection
- Color and Food Sorting
- OCT

Sensor Specifications

Resolution	512(H) x 2(V)	Pixel size	25 μm \times 25 μm
Maximum line rate	40.4 kHz	Peak QE	75% @1550nm
Full well capacity	85 ke ⁻ @ HG 1.6 Me ⁻ @ LG	Shutter type	Global shutter
Temporal noise	116 e ⁻ @ HG 450 e ⁻ @ LG	Output channel	2xSub-LVDS
Dynamic Range	58 dB @ HG 70 dB @ LG	Channel multiplexing	2 to 1
PRNU	<2%	Data rate	840 Mbps per channel
ADC bit depth	12bit	Power consumption	< 450 mW
Package	64-pin DIP	Supply voltages	3.3V for analog 1.5V for digital 1.8V for IO

Ordering Information

Sensor Part No.

GIR2505-AIM-NDN-AUD

InGaAs Image Sensor, 64-pin DIP ceramic package, sealed D 263® T eco glass without AR coating, Demo Grade

GIR2505-AIM-NDN-AUE

InGaAs Image Sensor, 64-pin DIP ceramic package, sealed D 263® T eco glass without AR coating, Engineering sample

Contact Gpixel HQ

Building #5, Optoelectronic
Information Industrial Park,
#7691 Ziyou Road,
Changchun, Jilin, China.

Tel: +86-0431-85077785
Email: info@gpixel.com
Website: www.gpixel.com



All rights reserved.
Subject to change without notice