



# Alvium GM2

Alvium GM2-158

Alvium GM2-158 innovative GMSL2 camera with Sony IMX273 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

## Generale

|                   |                |
|-------------------|----------------|
| Modello           | Alvium GM2-158 |
| Serie di prodotti | Alvium GM2     |
| Stato             | Available      |

## Sensore

|                                  |                                 |
|----------------------------------|---------------------------------|
| Tipo di sensore                  | Area scan                       |
| Croma                            | Color, Mono                     |
| Spettro                          | Visible                         |
| Gamma spettrale                  | 300 nm to 1100 nm               |
| Risoluzione                      | 1,456 × 1,088 (1.60 MP)         |
| Modello sensore                  | Sony IMX273                     |
| Architettura sensore (Materiale) | cmos                            |
| Tipi di otturatore               | Global shutter (GS)             |
| Dimensione sensore               | 5 × 3.8 mm (6.3 mm, Type 1/2.9) |
| Dimensione pixel                 | 3.45 µm × 3.45 µm               |

## Formati pixel

|                             |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| Profondità bit sensore      | 10-bit, 12-bit, 8-bit                                                    |
| Formati pixel monocromatici | GREY, RAW10, RAW12, RAW8, Y10, Y12                                       |
| Formati pixel YUV           | UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit |
| Formati pixel RGB           | BGR8, RGB3, RGB8 (default), RGB888 (default)                             |
| Formati pixel Bayer         | BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8                   |

## Prestazioni di imaging

|                              |      |
|------------------------------|------|
| Efficienza quantica @ 529 nm | 64 % |
|------------------------------|------|

## Tempi e guadagno

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Frequenza fotogrammi max. | Mainly depends on hardware and register settings. |
|---------------------------|---------------------------------------------------|

|                      |                    |
|----------------------|--------------------|
| Tempo di esposizione | 28 $\mu$ s to 10 s |
|----------------------|--------------------|

|          |                   |
|----------|-------------------|
| Guadagno | 0.0 dB to 48.0 dB |
|----------|-------------------|

## I/O e alimentazione

|                   |                      |
|-------------------|----------------------|
| Linee non isolate | 2 programmable GPIOs |
|-------------------|----------------------|

|                |           |
|----------------|-----------|
| Connettore I/O | Coax, STP |
|----------------|-----------|

|               |                       |
|---------------|-----------------------|
| Alimentazione | 5 VDC over MIPI CSI-2 |
|---------------|-----------------------|

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| Consumo energetico | Value for the integrated serializer adds to CSI-2 model value. |
|--------------------|----------------------------------------------------------------|

## Condizioni operative

|                                  |                             |
|----------------------------------|-----------------------------|
| Temperatura operativa (Custodia) | -20 °C to 65 °C ((housing)) |
|----------------------------------|-----------------------------|

## Proprietà meccaniche

|                                       |              |
|---------------------------------------|--------------|
| Dimensioni custodia (L x P x A in mm) | 41 × 29 × 29 |
|---------------------------------------|--------------|

|                     |                            |
|---------------------|----------------------------|
| Attacco/i obiettivo | C-Mount, CS-Mount, S-Mount |
|---------------------|----------------------------|

|      |      |
|------|------|
| Peso | 70 g |
|------|------|

## Memoria onboard e FPGA

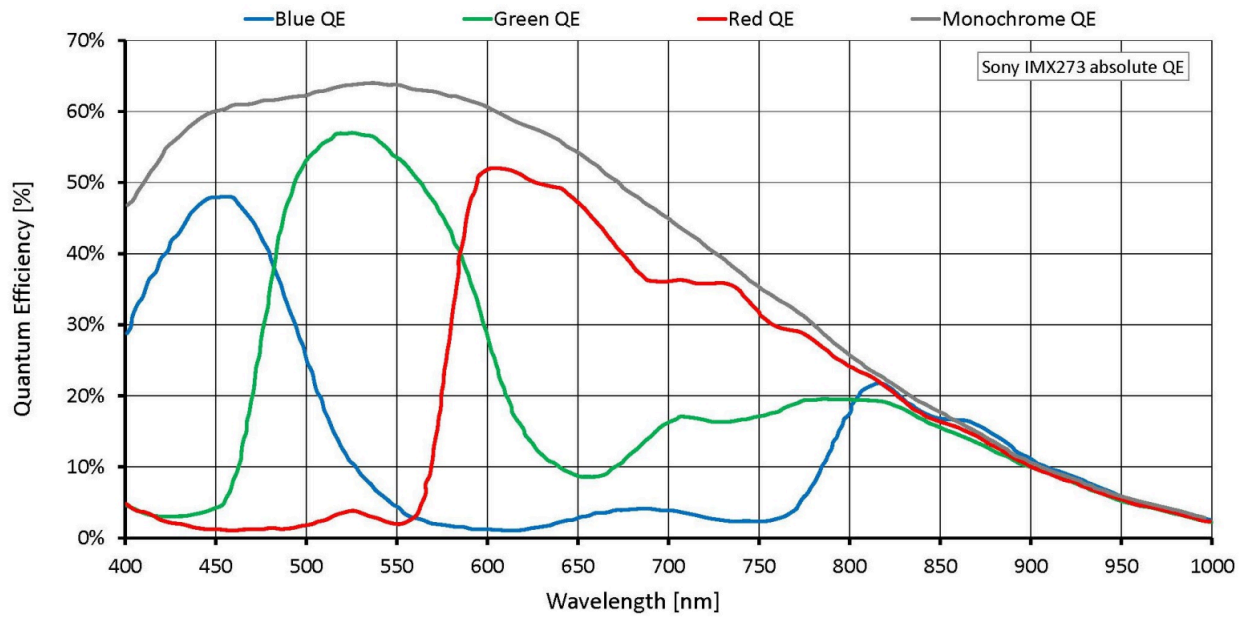
|                       |           |
|-----------------------|-----------|
| Buffer immagine (RAM) | 256 KByte |
|-----------------------|-----------|

|                              |            |
|------------------------------|------------|
| Memoria non volatile (Flash) | 1024 KByte |
|------------------------------|------------|

## Interfacce

|                      |                                           |
|----------------------|-------------------------------------------|
| Interfaccia digitale | GMSL2, based on MIPI CSI-2, up to 4 lanes |
|----------------------|-------------------------------------------|

## Efficienza quantica



## Disegno tecnico

