



# Alvium G1

## Alvium G1-040

Alvium G1-040 innovative GigE camera with Sony IMX287 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

### Generale

|                   |               |
|-------------------|---------------|
| Modello           | Alvium G1-040 |
| Serie di prodotti | Alvium G1     |
| Stato             | Available     |

### Sensore

|                                  |                       |
|----------------------------------|-----------------------|
| Tipo di sensore                  | Area scan             |
| Croma                            | Mono or Color         |
| Spettro                          | Visible               |
| Gamma spettrale                  | 300 nm to 1100 nm     |
| Risoluzione                      | 728 × 544 (0.40 MP)   |
| Modello sensore                  | Sony IMX287           |
| Architettura sensore (Materiale) | CMOS                  |
| Tipi di otturatore               | Global Shutter        |
| Dimensione sensore               | 6.3 mm ø (Type 1/2.9) |
| Dimensione pixel                 | 6.90 µm × 6.90 µm     |

### Formati pixel

|                             |                                                                         |
|-----------------------------|-------------------------------------------------------------------------|
| Profondità bit sensore      | 8-bit, 10-bit, 12-bit; Adaptive (10-bit, 12-bit)                        |
| Formati pixel monocromatici | Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono12Packed                   |
| Formati pixel YUV           | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr                    |
| Formati pixel RGB           | RGB8 (default), BGR8                                                    |
| Formati pixel Bayer         | BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BayerRG12Packed |

## Prestazioni di imaging

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

## Tempi e guadagno

|                           |         |
|---------------------------|---------|
| Frequenza fotogrammi max. | 298 fps |
|---------------------------|---------|

## I/O e alimentazione

|                   |                  |
|-------------------|------------------|
| Linee non isolate | 2 GPIOs (LVTTTL) |
|-------------------|------------------|

|                           |                   |
|---------------------------|-------------------|
| Linee otticamente isolate | 1 input, 1 output |
|---------------------------|-------------------|

|               |                                                        |
|---------------|--------------------------------------------------------|
| Alimentazione | 10.8 to 26.4 VDC AUX   IEEE 802.3af, Power Class 0 PoE |
|---------------|--------------------------------------------------------|

|                    |                                                                                  |
|--------------------|----------------------------------------------------------------------------------|
| Consumo energetico | External power: 3.1 W at 12 VDC (typical)   Power over Ethernet: 3.4 W (typical) |
|--------------------|----------------------------------------------------------------------------------|

## 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) | 32 MByte |
|-----------------------|----------|

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

## Interfacce

|                      |                                           |
|----------------------|-------------------------------------------|
| Interfaccia digitale | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
|----------------------|-------------------------------------------|

## Efficienza quantica



## Disegno tecnico

