

# PMS-CCN-120P15CSC

Gigabit Ethernet industrial camera

PMS-CCN-120P15CSC industrial camera with 12 MP (4096×3000), 1.1" global shutter CMOS sensor and 9 fps @ 4096×3000. Gigabit Ethernet output for machine vision, inspection and dimensional measurement.



| Model Specifications   |                                                                 |
|------------------------|-----------------------------------------------------------------|
| Sensor                 | 1.1" CMOS                                                       |
| Sensor Format          | 1.1"                                                            |
| Shutter Type           | Global shutter                                                  |
| Resolution             | 12 MP (4096×3000)                                               |
| Pixel Size             | 3.45 μm × 3.45 μm                                               |
| Frame Rate             | 9 fps @ 4096×3000                                               |
| Color Type             | Color                                                           |
| Interface              | GigE (Gigabit Ethernet), 1 Gbit/s                               |
| Maximum Cable Length   | 100 m without a repeater                                        |
| Protocol Compatibility | GigE Vision V2.0; GenICam                                       |
| Bit Depth              | 12 bit                                                          |
| Signal-to-noise Ratio  | >38 dB                                                          |
| Dynamic Range          | >70 dB                                                          |
| Gain Range             | 1×-32×                                                          |
| White Balance          | Normal auto white balance                                       |
| Gamma                  | 0-4; LUT supported                                              |
| Exposure Time          | 48 μs-1 s                                                       |
| GPIO                   | 6-pin Hirose: 1 opto-isolated input and 1 opto-isolated output  |
| Image Format           | Mono8; BayerRG8/10/10Packed; BayerGB8/10/10Packed; YUV422Packed |
| Binning                | Supported                                                       |
| Decimation             | Not supported                                                   |
| ROI                    | Supported                                                       |
| X Flip                 | Supported                                                       |
| Y Flip                 | Supported                                                       |
| Image Acquisition Mode | Software trigger / hardware trigger / free run                  |

| Model Specifications  |                                                                  |
|-----------------------|------------------------------------------------------------------|
| Image Buffer          | 128 MB                                                           |
| Power over Ethernet   | Supported                                                        |
| SPC                   | Supported                                                        |
| FPN                   | Not supported                                                    |
| Memory Channel        | 2 groups of user-defined configurations                          |
| Power Supply          | PoE or DC 6-26 V via Hirose connector                            |
| Power Consumption     | 3.2 W at 12 V                                                    |
| Operating Temperature | -30 °C to +50 °C                                                 |
| Storage Temperature   | -30 °C to +80 °C                                                 |
| Dimensions            | 29 × 44 × 58 mm, excluding lens mount and rear housing connector |
| Weight                | 100 g                                                            |
| Lens Mount            | C-mount                                                          |

| Features & Applications |                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------|
| Feature 1               | Gigabit Ethernet transfers uncompressed image data over cables up to 100 m without a repeater.          |
| Feature 2               | Automatic or manual gain, exposure and gamma adjustment; lookup-table processing.                       |
| Feature 3               | GigE Vision V2.0 and GenICam compatibility for third-party software integration.                        |
| Applications            | Machine vision; Industrial inspection; Microscopic imaging; Visual positioning; Dimensional measurement |

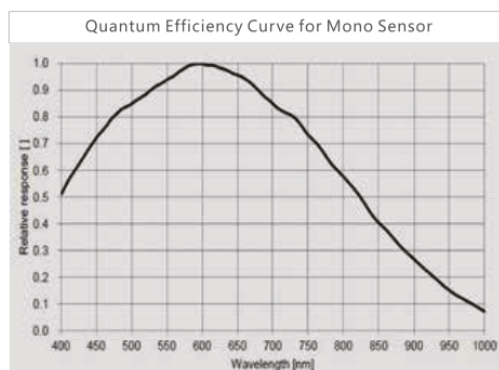
### I/O Connector Pinout

| Pin | Signal | Description                            |
|-----|--------|----------------------------------------|
| 1   | Power  | +6-26 V DC supply                      |
| 2   | Line1  | Opto-isolated input                    |
| 3   | Line2  | Configurable non-isolated input/output |
| 4   | Line0  | Opto-isolated output                   |
| 5   | IO GND | Optocoupler isolated ground            |
| 6   | GND    | DC power ground                        |

### Published specification notes

The model table specifies a 1.1-inch sensor; the series catalogs print 1/1 inch. The exact-model format is used. The 128 MB buffer in the parameter table takes precedence over 64 MB feature boilerplate.

## PMS-CCN-120P15CSC sensor response curve from its model datasheet



## PMS-CCN-120P15CSC product size diagram from its model datasheet

