

## 16mm f/11 HPi+ Lens 1.2"

#29-276



TECHSPEC® HPi+ Series Fixed Focal Length Lenses are designed to provide exceptional performance for the harsh demands of factory automation (FA) and machine vision. These lenses are designed for use with Sony's 4th Generation Pregius S™ 24.5MP 1.2" IMX530 and IMX540 sensors. The f/2.8 aperture provide increased light throughput and high-resolution performance. TECHSPEC® HPi+ Series Fixed Focal Length Lenses are C-Mount and are designed without an iris or focusing mechanism to drive down size, weight, and cost. These lenses are ideal for measurement and gauging, 3D stereo vision, and object tracking.

## General

|                    |                         |
|--------------------|-------------------------|
| Type:              | Fixed Focal Length Lens |
| Imaging Lens Type: | High Performance Lens   |

## Physical & Mechanical Properties

|                               |          |
|-------------------------------|----------|
| Iris Option:                  | Variable |
| Length (mm):                  | 109.20   |
| Maximum Diameter (mm):        | 62       |
| Outer Diameter (mm):          | 62       |
| Maximum Rear Protrusion (mm): | 4        |

## Optical Properties

|   |   |
|---|---|
| Horizontal Field of View, 1/2" Sensor:        | 23.3°   |
| Horizontal Field of View, 2/3" Sensor:        | 31.7°   |
| Horizontal Field of View, 1" Sensor:          | 45.9°   |
| Maximum Image Circle (mm):                    | 19.30   |
| Horizontal Field of View @ Max Sensor Format: | 52.0°   |
| Horizontal Field of View, 1.1" Sensor:        | 50.3°   |
| Number of Elements (Groups):                  | 9   |
| Horizontal Field of View, 1/1.8" Sensor:      | 26.1°   |
| Focal Length FL (mm):                         | 16.00   |
| Working Distance (mm):                        | 100mm to ∞                                      |
| Aperture (f/#):                               | f/11  |
| Coating:                                      | λ/4 MgF2  |
| Coating Specification:                        | λ/4 MgF2  |
| Entrance Pupil Position (mm):                 | 36.46   |
| Object Space Principal Plane (mm):            | 47.50   |
| Image Space Principal Plane (mm):             | -15.70  |
| Maximum Distortion (%):                       | 8.32  |
| FOV @ Max Sensor Format, H x V (mm):          | Horizontal: 52° Vertical: 45.2° Diagonal: 67.5° |
| Exit Pupil Position (mm):                     | -54.67  |
| Wavelength:                                   | VIS   |

## Sensor

|                        |      |
|------------------------|------|
| Maximum Sensor Format: | 1.2" |
|------------------------|------|

## Threading & Mounting

|                |            |
|----------------|------------|
| Filter Thread: | M58 x 0.75 |
| Mount:         | C-Mount    |

## Environmental & Durability Factors

|                           |  |
|---------------------------|--|
| Storage Temperature (°C): | -20 to +60 For questions regarding operating temperature please contact our support team |
|---------------------------|--|





April 17, 2025

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

| <i>Stock No.</i> | <i>Description</i>       |
|------------------|--------------------------|
| 29-276           | 16mm f/11 HPI+ Lens 1.2" |

This item is EU RoHS (2011/65/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance

April 17, 2025

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Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations