SMART VISION SENSOR

AMS3X Series
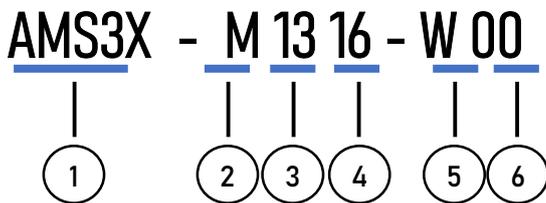

INTRODUCTION

AMS3X Series, feature-rich smart vision sensor, comes with Existence, Positioning, Counting, Measurement, and Recognition (with Deep Learning) Tools.

Program can be configured via SCMVS Client Software, which could save development cost and time.
It can also communicate with most industrial protocol such as RS-232, Ethernet, IO, Modbus, Profinet, TCP.

Embedded hardware, built-in light source, and embedded IO ensure high-speed image processing and synchronized operation.
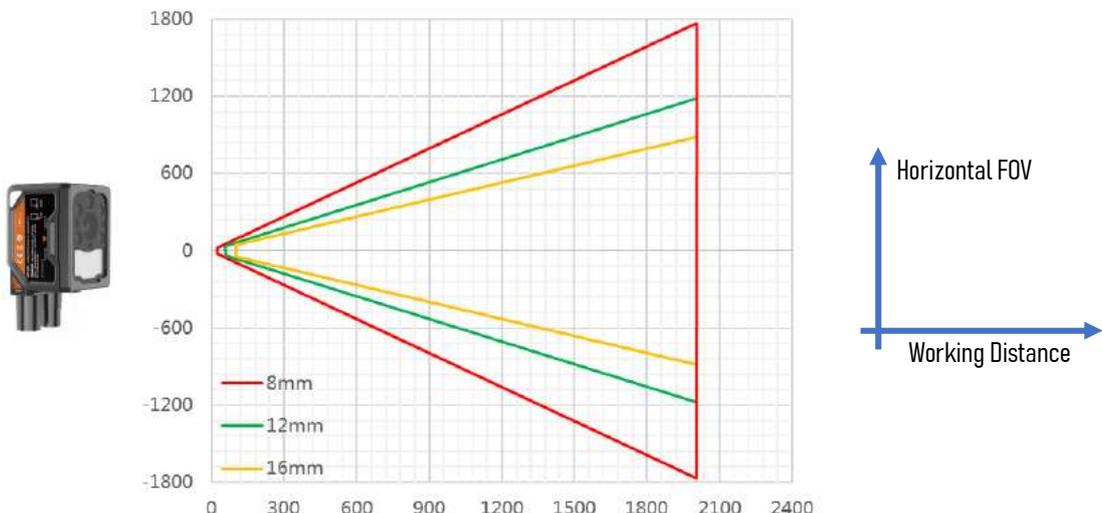
CE KC

AVAILABLE MODELS

AMS3X - M 13 16 - W 00

(1)   (2)(3)(4) (5)(6)

1	PRODUCT SERIES	AMS3X = AMS3X Smart Vision Sensor Series
2	MONO / COLOR	M = Mono, C = Color
3	SENSOR RESOLUTION	13 = 1.3MP, 30 = 3.0MP, 50 = 5.0MP
4	LENS FOCAL LENGTH	08 = 8mm, 12 = 12mm, 16 = 16mm
5	BUILT-IN LED LIGHT	W = White, R = Red, B = Blue, I = IR
6	REMARK	00 = General Model

FIELD OF VIEW SELECTION

Horizontal FOV

Working Distance

Legend:
- 8mm
- 12mm
- 16mm

SPECIFICATION

Sensor Characteristic

Sensor type	CMOS, Global shutter
Pixel size	6.9 μm x 6.9 μm (For 1.3MP) / 3.45 μm x 3.45 μm (For 5MP)
Sensor size	1/1.45"
Resolution	1,216 x 1,024 pixels (1.3MP) / 2,432 x 2,048 pixels (5MP)
Max frame rate	60 fps (For 1.3MP) / 40 fps (For 5MP)
Dynamic range	77.8 dB
SNR	43 dB
Gain	0 dB to 15 dB
Exposure time	6 μs to 1 s

Electrical Information

Data interface	12-pin, M12 connector for Power, Ethernet, Digital I/O, and Serial Port
Ethernet	Fast Ethernet
Digital I/O	Input signal x 3 (Line 0/1/2), Output signal x 3 (Line 3/4/5) Opto-Isolated Type for input and output
Power requirement	24 VDC
Power consumption	Approx. 6.5W @ 24VDC

Mechanical Information

Lens Mount	M12-mount, mechanical autofocus lens
Focal Length	8mm / 12mm / 16mm (Selectable)
Lens cap	Transparent cap. Polarized or Infrared filter cap is optional
Light source	White LED. Red / Blue / NIR is optional + Orange Aiming Light
Indicator	360° visual indicator
Dimension	80.1 mm x 43 mm x 44.3 mm (Straight angle) 58.5 mm x 43 mm x 65.4 mm (Right angle)
Weight	Approx 190 g.
Ingress Protection	IP67 (under proper installation of lens and wiring)
Temperature	Working Temp: 0 °C to 50 °C Storage Temp: -30 °C to 70 °C
Humidity	20% to 95% RH, non-condensing

Others

Client software	SCMVS
Certification	CE, KC

Software

Vision Tool	Existence: Pattern / spot / edge / circle / line / contour Count: Pattern / spot / edge / contour Defect detection: Exception detection Measurement: Color Size / Brightness / contrast / greyscale / geometry (Angle, Width, Edge Width, Diameter, P2L, Line Angle) Recognition: OCR, Code Recognication, Color Contrast/Recognition, Classification registration, Object detection registration Location: Match Calibration, Match Location, Fixture Deep Learning: DL object detection, DL classification
Solution capacity	Support up to 32 solutions
Communication protocol	Serial, TCP, UDP, FTP, Profinet, Modbus, Ethernet/IP,MELSEC/SLMP, FINS, Keyence KV