

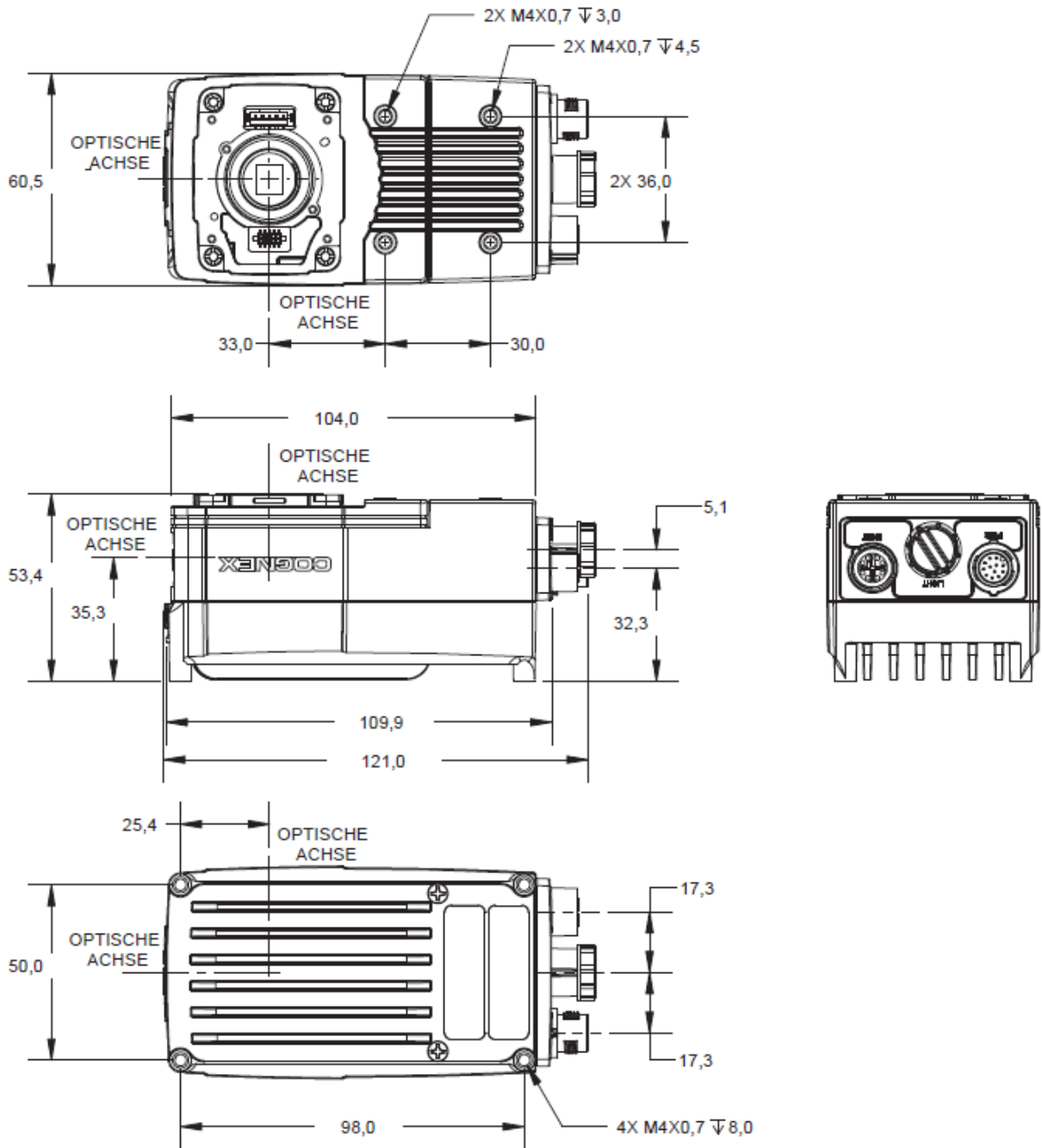


Deep Learning on a Smart Camera







- Intelligent camera including ViDi software for deep learning applications
- Deep learning applications can be run without a PC
- Examples of use: Reading text, assembly inspection and defect detection
- Stand-alone System: image acquisition and evaluation on the device
- Easy to use

Specifications			
Models		D902 and D902C	D905 and D905C
Image Type		Monochrome and Color	
Sensortyp		1/2.3 inch CMOS (3.45 μm x 3.45 μm pixels)	2/3 inch CMOS (3.45 μm x 3.45 μm pixels)
Resolution (pixels)		2,3 MP (1920 x 1200)	5 MP (2448 x 2048)
Acquisition Speed (Max)		75 fps (Color: 34 fps)	35 fps (Color: 16 fps)
Memory	File storage	16GB non-volatile flash memory; unlimited storage via remote network device	
	Processing	3 GB SDRAM	
	Additional Storage	8 GB SD card, network drive via FTP over gigabit network	
Optics	Lenses	C-Mount, S-Mount, Autofocus	
	Indicator LEDs	SD card status, pass/fail LED and 360° viewing indicator ring, network LED, and error LED	
	Lighting	External lights via light control connector	
I/O	Network	Gigabit Ethernet (10/100/1000 Mbps)	
	Built-in	1 dedicated trigger IN, 1 general purpose IN, 2 general purpose OUT, 2 bi-direction IN/OUT	
Mechanical	Industrial M12 Connectors	Power/IO; Ethernet; External light power/control	
	Dimensions	53.4 mm (2.10 in) x 60.5 mm (2.38 in) x 121.0 mm (4.77 in)	
	Weight	380 g (13.4 oz.)	
	Protection	IP67 with C-mount lens cover or integrated light connected	
Power		24 VDC	
Required firmware		In-Sight ViDi 1.2.0 (Color: In-Sight ViDi 1.3.0)	

Technical drawing



In-Sight D900 – Model differences regarding tools			
Tools / Models	ViDiRead Only / 3701	ViDi App Tools Only / 3708	All ViDi Tools / 3709
ViDi Read	✓	✓	✓
ViDi Check	-	✓	✓
ViDi Detect	-	✓	✓
Read	-	-	✓
Locate	-	-	✓
Analyze	-	-	✓
Classify	-	-	✓

In-Sight D900 – App Tools vs. Standard ViDi Tools		
 =  + Tool Chain, Node Model, Coordinate Output	 =  + Parallel Execution	 =  + Tool Chain, Supervised Mode, Parallel Execution

In-Sight D900 - Order data	
<i>Item No.</i>	<i>Description</i>
042346	In-Sight D902 Monochrome (2MP) 3701 Vision System with HDR+ and ViDiRead
042245	In-Sight D902 Monochrome (2MP) 3708 Vision System with HDR+ and ViDi (App-Tools) Toolset: Standard In-Sight 2D Vision Tools plus ViDiDetect, ViDiCheck, and ViDiRead
042246	In-Sight D902 Monochrome (2MP) 3709 Vision System with HDR+ and ViDi (complete Toolset) Toolset: Standard In-Sight 2D Vision Tools plus ViDi, ViDiDetect, ViDiCheck, and ViDiRead
042344	In-Sight D905 Monochrome (5MP) 3701 Vision System with HDR+ and ViDiRead
042247	In-Sight D905 Monochrome (5MP) 3708 Vision System with HDR+ and ViDi (App-Tools) Toolset: Standard In-Sight 2D Vision Tools plus ViDiDetect, ViDiCheck, and ViDiRead
042248	In-Sight D905 Monochrome (5MP) 3709 Vision System with HDR+ and ViDi (complete Toolset) Toolset: Standard In-Sight 2D Vision Tools plus ViDi, ViDiDetect, ViDiCheck, and ViDiRead
042345	In-Sight D902 Color (2MP) 3701 Vision System with HDR+ and ViDiRead
042315	In-Sight D902 Color (2MP) 3708 Vision System with HDR+ and ViDi (App-Tools) Toolset: Standard In-Sight 2D Vision Tools plus ViDiDetect, ViDiCheck, and ViDiRead
042316	In-Sight D902 Color (2MP) 3709 Vision System with HDR+ and ViDi (complete Toolset) Toolset: Standard In-Sight 2D Vision Tools plus ViDi, ViDiDetect, ViDiCheck, and ViDiRead
042343	In-Sight D905 Color (5MP) 3701 Vision System with HDR+ and ViDiRead
042317	In-Sight D905 Color (5MP) 3708 Vision System with HDR+ and ViDi (App-Tools) Toolset: Standard In-Sight 2D Vision Tools plus ViDiDetect, ViDiCheck, and ViDiRead
042318	In-Sight D905 Color (5MP) 3709 Vision System with HDR+ and ViDi (complete Toolset) Toolset: Standard In-Sight 2D Vision Tools plus ViDi, ViDiDetect, ViDiCheck, and ViDiRead

Further order data	
Item No.	Description
041635	Extended C-Mount cover, enables IP67, maximum lens length 62mm, maximum lens diameter 36.5mm, maximum lens diameter including fixing screws 46.5mm
041540	C-Mount cover, enables IP67, maximum lens length 41mm, maximum lens diameter 36.5mm, maximum lens diameter including fixing screws 47mm
041569	Illumination cap, white, contains diffuse cover cap and white illumination, lens max. diameter 29.5mm, max. length 38.5mm without using bandpass filter and max. length 36mm when using bandpass filter
042041	Cover cap without illumination
042042	Front part cover cap, diffuse, lighting cap item no. 041569, spare part without lighting
041571	Front part cover cap, clear, lighting cap item 041569, spare part without lighting
041572	Front part cover cap with polarizing filter for lighting cap item no. 041569, spare part
041573	LED ring light, red for illumination cap item no. 041569, wavelength 617nm
041574	LED ring light, IR for illumination cap item no. 041569, wavelength 850nm
041575	LED ring light, blue, to be used with the accessory illumination cap (041569)
041576	LED ring light, white, replacement for ring light Light cap item no. 041569
041577	Bandpass filter, red
041578	Bandpass filter, IR
041579	Bandpass filter, blue
041570	Autofocus module with 8mm lens, possible alternative S-Mount/M12 lenses: 6mm (Item 041407), 12mm (Item 041192), 16mm (Item 041193), 25mm (Item 041194)
041976	Autofocus tool, allows to change the ISAF-7000-8mm; Contains: 1 lens changing tool, 2 blue washers, 4 black washers
041407	S-Mount lens (M12), 6.0mm, requires installation tool (041580)
041636	S-Mount lens (M12), 8.0mm, f2.2, requires installation tool (041580)
041637	S-Mount lens (M12), 12.0mm, f2.3, requires installation tool (041580)
041193	S-Mount lens (M12), 16.0mm, requires Spacer (041408)
041194	S-Mount lens (M12), 25.0mm, requires Spacer (041409)
041580	S-Mount/M12 adapter incl. mounting tool for fix focus lens
040480	S-Mount cap, clear for M12 lens (S-Mount), without illumination
040619	Clear illumination cap, white suitable for M12 lens
011572	Narrow Bar Light Yellow Housing
040526	Cable, lighting, 0.5m M12-5 plug (camera) <-> M12-5 socket

Further order data	
Item No.	Description
040627	Cable, lighting, 5m M12-5 plug (camera) <-> M12-5 socket
041875	Cable, lighting, 1m M12-5 plug (camera) <-> M12-5 socket
041242	Cable Ethernet, M12 x-coded straight <-> RJ45, 5m
041371	Cable Ethernet, M12 x-coded straight <-> RJ45, 2m
041372	Cable Ethernet, M12 x-coded straight <-> RJ45, 10m
041373	Cable Ethernet, M12 x-coded straight <-> RJ45, 15m
041497	Cable Ethernet, M12 x-coded straight <-> RJ45, 30m
041866	Ethernet cable, M12 x-coded 90° <-> RJ45, 2m
041867	Ethernet cable, M12 x-coded 90° <-> RJ45, 5m
041868	Ethernet cable, M12 x-coded 90° <-> RJ45, 10m
041977	Cable Ethernet Rob, M12 x-coded straight <-> RJ45, 2m
041978	Cable Ethernet Rob, M12 x-coded straight <-> RJ45, 5m
041979	Cable Ethernet Rob, M12 x-coded straight <-> RJ45, 10m
040472	Cable, power/IO/RS232 5m, straight, 12-pin, M12 <-> open end
040473	Cable, power/IO/RS232 5m, angled, 12-pin, M12 <-> open end
040519	Cable, power/IO/RS232 10m, straight, 12-pin, M12 <-> open end
040520	Cable, power/IO/RS232 15m, straight, 12-pin, M12 <-> open end
040521	Cable, power/IO/RS232 10m, angled, 12-pin, M12 <-> open end
040522	Cable, Power/IO/RS232 15m, angled, 12-pin, M12 <-> open end
041720	Cable, power/IO/RS232, 5m straight, 12-pin, M12 <-> DB15 for CIO 1400