

# Vision System FZ5-Series

## A range of processing items for positioning and inspection

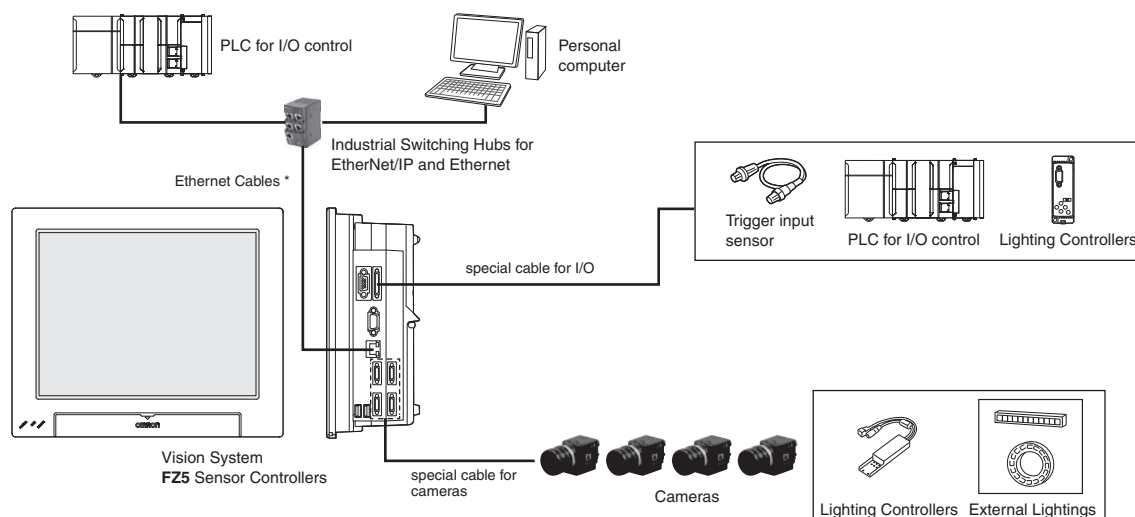
- The High-precision Object Detection Required for Positioning
- Converting Measurement Results to Output User Units
- Easily Integrate Interfaces into the Machine
- Easy Setup with Program Scalability



## System configuration

### EtherNet/IP, No-protocol Ethernet and PLC Link Connections



Example of the FZ5 Sensor Controllers (4-camera type)



\* To use Straight or cross STP (shielded twisted-pair) cable of category 5 or higher for Ethernet and RJ45 connector.

## Ordering Information

### FZ5 Series Sensor Controllers








Item	CPU	No. of cameras	Output	Model
 Controllers integrated with LCD	High-speed Controllers	2	NPN	FZ5-1200
			PNP	FZ5-1205
		4	NPN	FZ5-1200-10
			PNP	FZ5-1205-10
		2	NPN	FZ5-1100 *
			PNP	FZ5-1105 *
	4	NPN	FZ5-1100-10 *	
		PNP	FZ5-1105-10 *	
	Standard Controllers	2	NPN	FZ5-800
			PNP	FZ5-805
		4	NPN	FZ5-800-10
			PNP	FZ5-805-10
2		NPN	FZ5-600 *	
		PNP	FZ5-605 *	
4	NPN	FZ5-600-10 *		
	PNP	FZ5-605-10 *		
 Box-type controllers	Lite Controllers	2	NPN	FZ5-L350
			PNP	FZ5-L355
	4	NPN	FZ5-L350-10	
		PNP	FZ5-L355-10	

\* The production of the FZ5-series Controllers FZ5-1100(-10)/-1105(-10)/-600(-10)/-605(-10) will be discontinued at the end of May 2018.








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# FZ5-Series

## Cameras

Item	Descriptions	Color / Monochrome	Image Acquisition Time	Model
	5 million pixels (When connecting FZ5-6□ or FZ5-L35□, up to two cameras can be connected.)	Color	38.2 ms	FZ-SC5M3
		Monochrome		FZ-S5M3
	2 million pixels	Color	33.3 ms	FZ-SC2M
		Monochrome		FZ-S2M
	300,000 pixels	Color	12.5 ms	FZ-SC
		Monochrome		FZ-S
	300,000 pixels	Color	4.9 ms	FZ-SHC
		Monochrome		FZ-SH
	300,000-pixel flat type	Color	12.5 ms	FZ-SFC
		Monochrome		FZ-SF
	300,000-pixel pen type	Color	12.5 ms	FZ-SPC
		Monochrome		FZ-SP
	Narrow view	Color	16.7 ms	FZ-SQ10F
	Standard view	Color		FZ-SQ50F
	Wide View (long-distance)	Color		FZ-SQ100F
	Wide View (short-distance)	Color		FZ-SQ100N

## Camera Cables

Item	Descriptions	Cable length *2	Model
	Camera Cable	2m	FZ-VS3 2M
		3m	FZ-VS3 3M
		5m	FZ-VS3 5M
		10m	FZ-VS3 10M
	Bend resistant Camera Cable	2m	FZ-VSB3 2M
		3m	FZ-VSB3 3M
		5m	FZ-VSB3 5M
		10m	FZ-VSB3 10M
	Right-angle Camera Cable *1	2m	FZ-VSL3 2M
		3m	FZ-VSL3 3M
		5m	FZ-VSL3 5M
		10m	FZ-VSL3 10M
	Bend resistant Right-angle Camera Cable *1	2m	FZ-VSLB3 2M
		3m	FZ-VSLB3 3M
		5m	FZ-VSLB3 5M
		10m	FZ-VSLB3 10M
	Long-distance Camera Cable	15m	FZ-VS4 15M
	Long-distance Right-angle Camera Cable *1	15m	FZ-VSL4 15M
	Cable Extension Unit Up to two Extension Units and three Cables can be connected. (Maximum cable length: 45 m *2)	-	FZ-VSJ

\*1 This Cable has an L-shaped connector on the Camera end.

\*2 The maximum cable length depends on the Camera being connected, and the model and length of the Cable being used. For further information, please refer to the "Cameras / Cables Connection Table" and "Maximum Extension Length Using Cable Extension Units FZ-VSJ".

## Cameras / Cables Connection Table

Type of camera	Model	Cable length	Digital CCD/CMOS cameras			Small digital CCD cameras Pen type / flat type	High-speed CCD cameras	Intelligent compact CMOS cameras
			300,000-pixel	2 million-pixel	5 million-pixel			
			FZ-S/SC	FZ-S2M/SC2M	FZ-S5M3/ SC5M3	FZ-SF/SFC FZ-SP/SPC	FZ-SH/SHC	FZ-SQ□
Camera Cables Right-angle camera cables	FZ-VS3 FZ-VSL3	2 m	Yes	Yes	Yes	Yes	Yes	Yes
		3 m	Yes	Yes	Yes	Yes	Yes	Yes
		5 m	Yes	Yes	Yes	Yes	Yes	Yes
		10 m	Yes	Yes	No	Yes	Yes	Yes
Bend resistant camera cables Bend resistant Right-angle Camera Cable	FZ-VSB3 FZ-VSLB3	2 m	Yes	Yes	Yes	Yes	Yes	Yes
		3 m	Yes	Yes	Yes	Yes	Yes	Yes
		5 m	Yes	Yes	Yes	Yes	Yes	Yes
		10 m	Yes	Yes	No	Yes	Yes	Yes
Long-distance camera cable Long-distance right-angle camera cable	FZ-VS4 FZ-VSL4	15 m	Yes	Yes	No	Yes	Yes	Yes