

NO: VS-060 **PRODUCT:** FZM1 Positioning Vision Sensor
DATE: June 2015 **TYPE:** Discontinuation Notice

FZM1-35□-ECT Vision Sensors for Positioning were Discontinued; Replace with FH Series

Discontinuation Date: FZM1 has been discontinued.

Affected Parts

Product discontinuation	Recommended replacement
FZM1-350-ECT	FH-1050
FZM1-355-ECT	



Cautions on Applying Replacements

- The camera, camera cable, lens and illumination, etc. can be used, when FZM1 series are changed to FH series. However, the FZM1 parallel I/O cable cannot be used with the FH series.
- When connecting FH series to an RGB analog monitor, use the DVI-I-RGB Conversion Connector Model FH-VMRGB (for FH Series only).
- Confirm the measuring time etc. before changing over to the FH Series because these series have different CPUs.

If using customized software

Contact the system integrator or OEM who provided the FJ vision controller to determine if custom software was installed. It is necessary to get the replacement FH from the same OEM to make sure the customized software is provided.

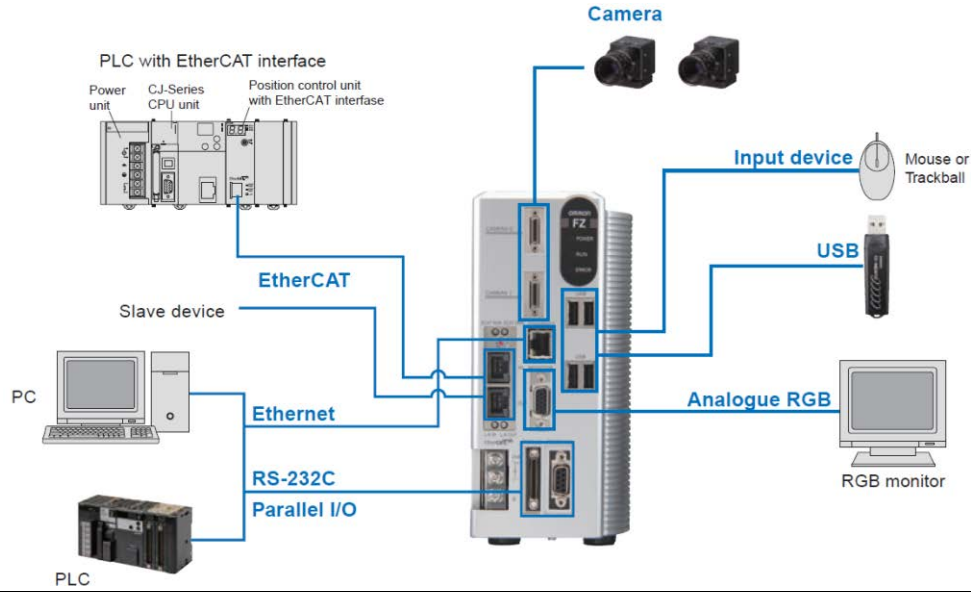
Detail of Differences

Body color

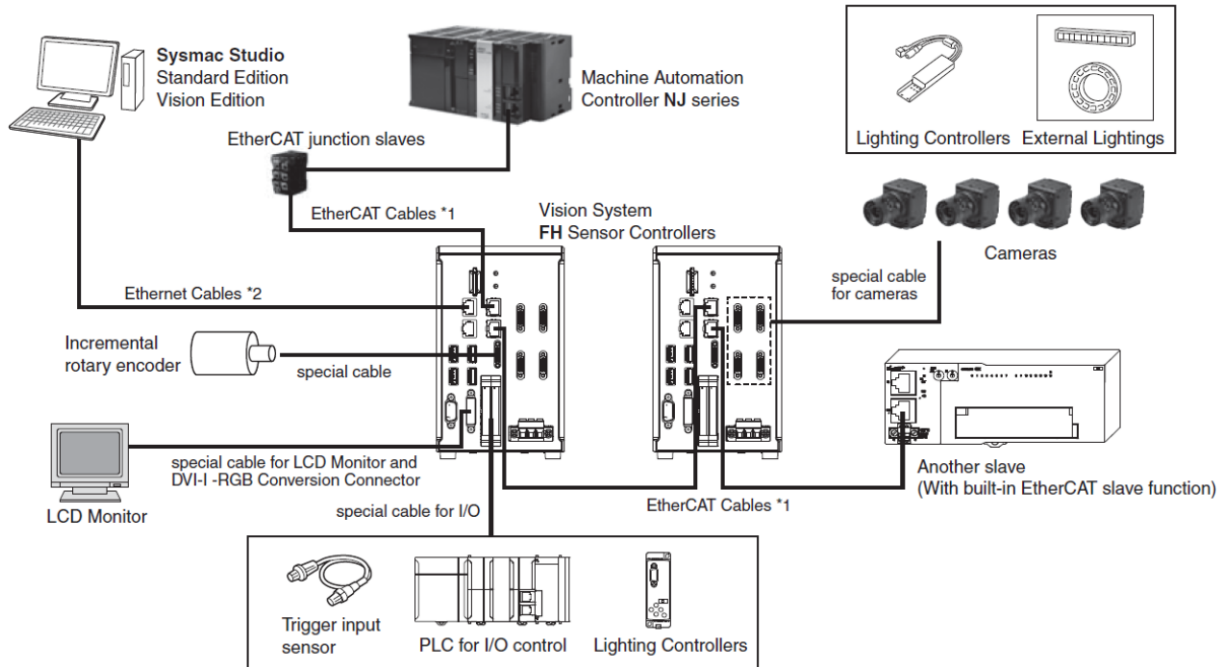
Product discontinuation Model FZM1-350-ECT/FZM1-355-ECT	Recommended replacement Model FH-1050
	<p>Notice: This picture shows Model FH-1050-20 (8-camera type).</p>

System configuration

Product discontinuation Model FZM1-350-ECT/FZM1-355-ECT



Recommended replacement Model FH-1050

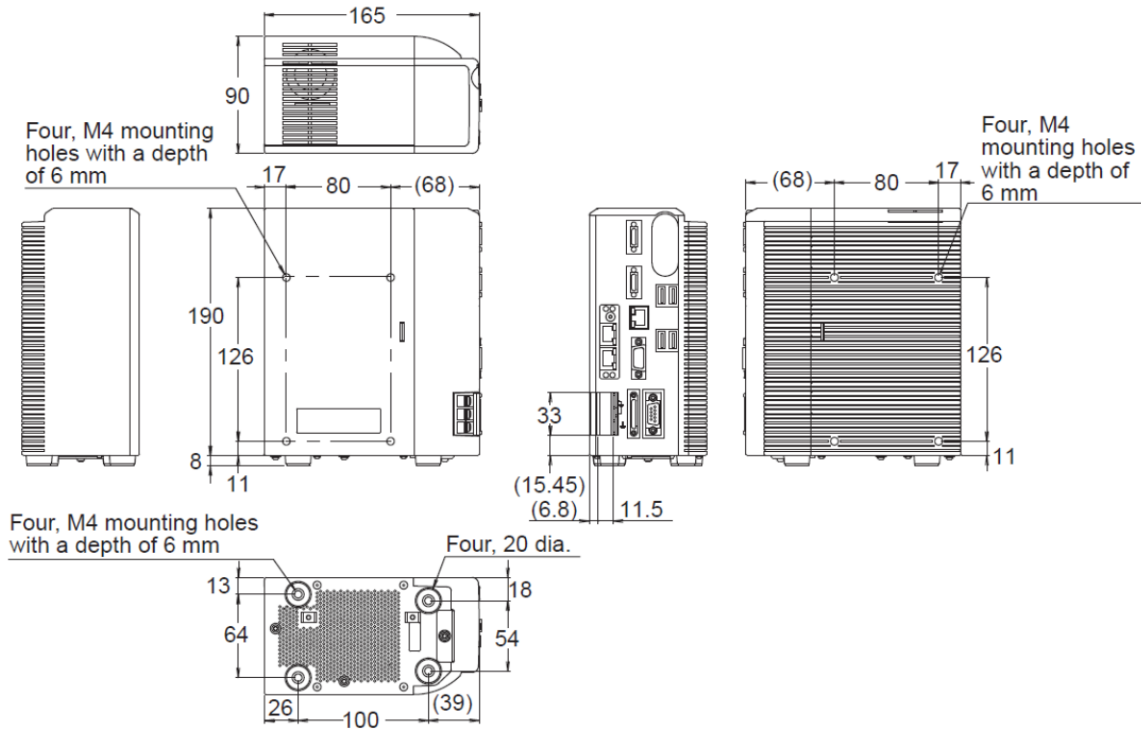


*1. To use STP (shielded twisted-pair) cable of category 5 or higher with double shielding (braiding and aluminum foil tape) for EtherCAT and RJ45 connector.

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

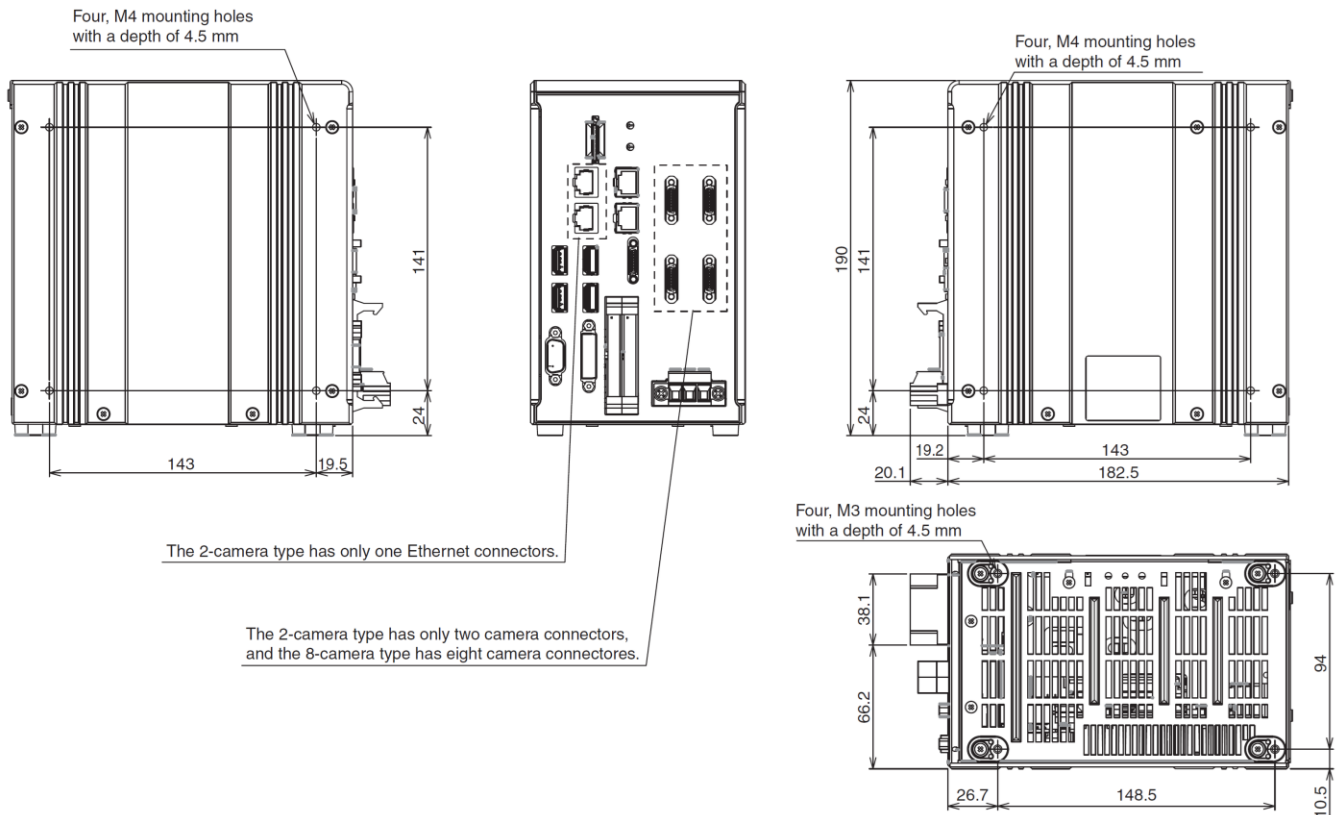
Dimensions

Product discontinuation Model FZM1-350-ECT/FZM1-355-ECT



[Unit: mm]

Recommended replacement Model FH-1050



[Unit: mm]

Main functions

Item		Product discontinuation Model FZM1-350-ECT Model FZM1-355-ECT	Recommended replacement Model FH-1050		
Connected Camera		Can be connected to all cameras. (except for a 5 million-pixel cameras)	Can be connected to all cameras. (FZ-S series/FH-S series)		
No. of Cameras		2			
Processing resolution (FZ-S)	When connected to an intelligent compact camera	--	752 (H) × 480 (V)		
	When connected to a 300,000-pixel camera	640 (H) × 480 (V)			
	When connected to a 2 million-pixel camera	1600 (H) × 1200 (V)	FZ-S:1600 (H) × 1200 (V) FH-S:2040 (H) × 1088 (V)		
	When connected to a 4 million-pixel camera	--	2040 (H) × 2048 (V)		
	When connected to a 5 million-pixel camera	--	2448 (H) × 2044 (V)		
No. of scenes		32	128		
Number of logged images (See note 1.)	When connected to a intelligent compact camera	Connected to 1 camera	--	232	
		Connected to 2 camera	--	116	
	When connected to a 300,000-pixel camera	Connected to 1 camera	Color Camera: 250 Monochrome Camera: 252	Color Camera: 270 Monochrome Camera 272	
		Connected to 2 camera	Color Camera: 125 Monochrome Camera: 126	Color Camera: 135 Monochrome Camera: 136	
	When connected to a 2 million-pixel camera (FZ-S)	Connected to 1 camera	Color /Monochrome: 40	Color /Monochrome: 43	
		Connected to 2 camera	Color /Monochrome: 20	Color /Monochrome: 21	
	When connected to a 2 million-pixel camera (FH-S)	Connected to 1 camera	--	Color /Monochrome: 37	
		Connected to 2 camera	--	Color /Monochrome: 18	
	When connected to a 4 million-pixel camera (FH-S)	Connected to 1 camera	--	Color /Monochrome: 20	
		Connected to 2 camera	--	Color /Monochrome: 10	
	When connected to a 5 million-pixel camera (FZ-S)	Connected to 1 camera	--	Color /Monochrome: 16	
		Connected to 2 camera	--	Color /Monochrome: 8	
	Operation		Mouse or similar device		
	Settings		Create series of processing steps by editing the flowchart (Help messages provided).		
	Weight		Approx. 1.9kg	Approx. 3.2kg	
Accessories		<ul style="list-style-type: none"> • Please Read First, • Instruction manual (Setup) 	<ul style="list-style-type: none"> • User manual • Instruction Manual • Power supply terminal block connector • Ferrite core 		

Note: 1. The image logging capacity changes when multiple cameras of different types are connected at the same time.

Operation Environment

Item	Product discontinuation Model FZM1-350-ECT Model FZM1-355-ECT	Recommended replacement Model FH-1050
Ambient temperature range	Operating: 0 to 45 °C, 0 to 50 °C (See note 2.), Storage: -20 to 65 °C (with no icing or condensation)	Operating: 0 to 50 °C Storage: -20 to 65 °C (with no icing or condensation)
Ambient humidity range	Operating and storage: 35% to 85% (with no condensation)	

Note : 2. The operating mode can be switched from the Controller Menu settings.

External interface

Item	Product discontinuation		Recommended replacement Model FH-1050
	NPN	FZM1-350-ECT	
	PNP	FZM1-355-ECT	
Serial communications	RS-232C/422A-1CH		RS-232C 1CH
EtherNet communications	Ethernet 100BASE-TX/10BASE-T		No-protocol (TCP/UDP) 1000BASE-T 1 port
EtherNet/IP communications	--		Ethernet port baud rate: 1 Gbps (1000 BASE-T)
EtherCAT communications	EtherCAT protocol (100BASE-TX)		
Parallel I/O	13 input (RESET, ENCTRG_A, ENCTRG_B, STEP/ENCTRG_Z, DSA, and DI0 to 7) 24 output (RUN, BUSY, GATE, OR, READY, ERROR, STGPUT0 to 1, and DO0 to 15)		(In the 2-line random trigger mode) 17 inputs (STEP0/ENCTRIG_Z0, STEP1/ENCTRIG_Z1, ENCTRIG_A0 to 1, ENCTRIG_B0 to 1, DSA0 to 1, DI0 to 7, DI_LINE0) 37 outputs (RUN0 to 1, READY0 to 1, BUSY0 to 1, OR0 to 1, ERROR0 to 1, GATE0 to 1, STGOUT0/SHTOUT0, STGOUT1/SHTOUT1, STGOUT2 to 7, DO0 to 15, ACK) (In the 5-line to 8-line random trigger mode) 19 inputs (STEP0 to 7, DI_LINE0 to 2, DI0 to 7) 34 outputs (READY0 to 7, BUSY0 to 7, OR0 to 7, ACK, ERROR, STGOUT/SHTOUT0 to 7)
Encoder interface	--		RS422-A line driver level. Phase A/B: single-phase 4MHz (multiplying phase difference of 1MHz by 4 times), Phase Z: 1MHz
Monitor interface	Analog RGB video output, 1 channel (Resolution: XGA 1,024 x 768 dots)		DVI-I output IF x 1ch
USB interface	4 channels (supports USB 1.1 and 2.0)		
SD card interface	--		SDHC card of Class4 or higher rating is recommended.

Ratings

Item		Product discontinuation Model FZM1-350-ECT Model FZM1-355-ECT	Recommended replacement Model FH-1050
Power supply voltage		20.4 to 26.4 VDC	
Current consumption (at 24.0 VDC) *3	When connected to a Intelligent compact camera	--	4.7 A max.
	When connected to a intelligent or autofocus camera	5.0 A max.	
	When connected to a 300,000-pixel camera	3.7 A max.	3.6 A max.
	When connected to a 2 million- pixel camera		
	When connected to a 4 million- pixel camera	--	
	When connected to a 5 million- pixel camera	--	

Note: 3. When the strobe controller is connected to the lights, the controller uses power as much as it does when connected to the intelligent camera.

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.