NO:	**VS-118**	**PRODUCT:**	**FH-1050**
DATE:	**May 2020**	**TYPE:**	**Discontinuation Notice**

Discontinuation Notice of Vision System FH-1050 series Standard Controller (2 cores)

Product Discontinuation	Recommended Replacement
Vision System Standard Controller (2 cores)	Vision System High-speed / Large-capacity Controller (2 cores)
Model FH-1050 **Model FH-1050-10** **Model FH-1050-20**	**Model FH-2050** **Model FH-2050-10** **Model FH-2050-20**

[Final order entry date]
The end of May, 2021
(The date will be put off until the end of August 2026 only if there is inventory)

[Date of The Last Shipping]
The end of August, 2021
(The date will be put off until the end of August 2026 only if there is inventory)

[Scheduled date of maintenance close]
The end of August, 2026

[Caution on recommended replacement]
As CPU is different, please consider processing time beforehand when you consider substitution.

In case of using remodeling software
If modified software is used, operation verification will be required, so including version upgrades
Please contact a trading company.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charac-teristics	Operation ratings	Operation methods
FH-2050 series	*	**	*	**	--	--	**

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
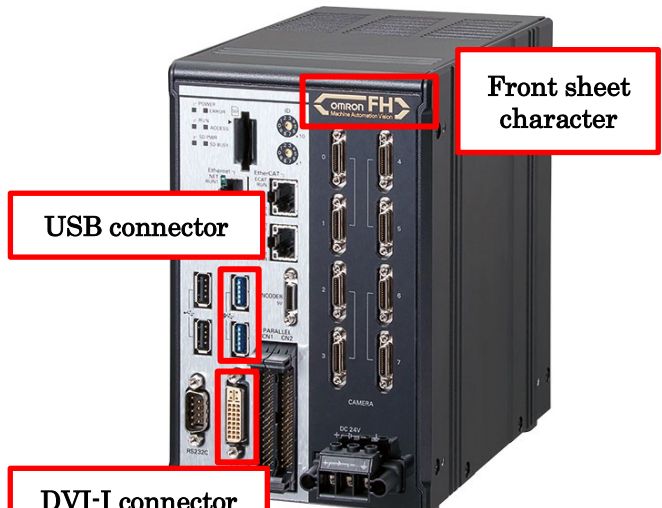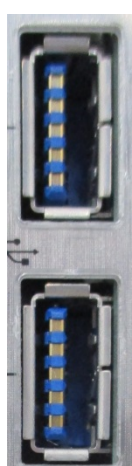\- : No corresponding specification
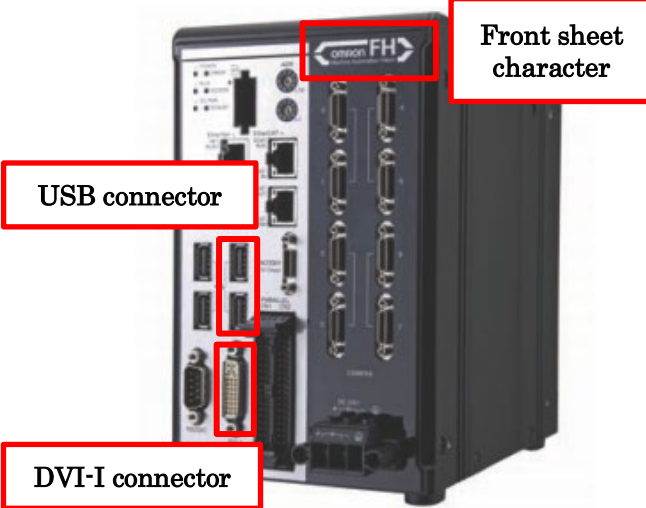
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
FH-1050	FH-2050
FH-1050-10	FH-2050-10
FH-1050-20	FH-2050-20
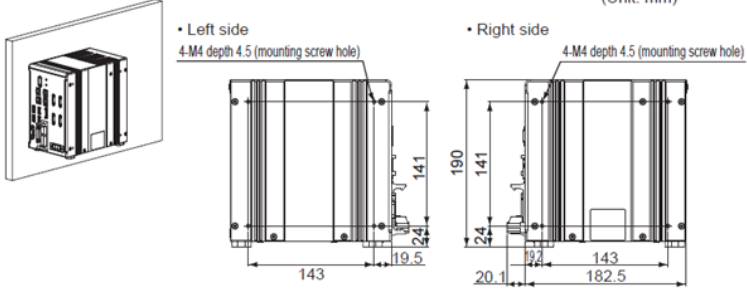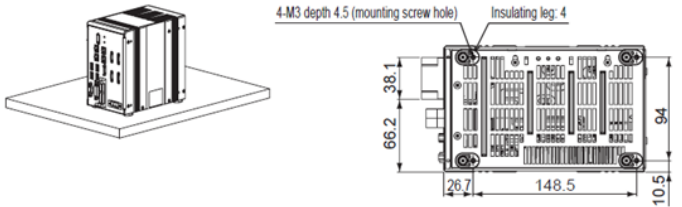
[Body color]

Product discontinuation Model FH-1050 series	Recommendable replacement Model FH-2050 series
Front sheet character：Silver USB connector（Right ports）：Black DVI-I connector：Cream	Front sheet character：Gold USB connector（Right ports）：Blue DVI-I connector：White
Front sheet character USB connector DVI-I connector	Front sheet character USB connector DVI-I connector
USB connector DVI-I connector	USB connector DVI-I connector

[Wire connection]
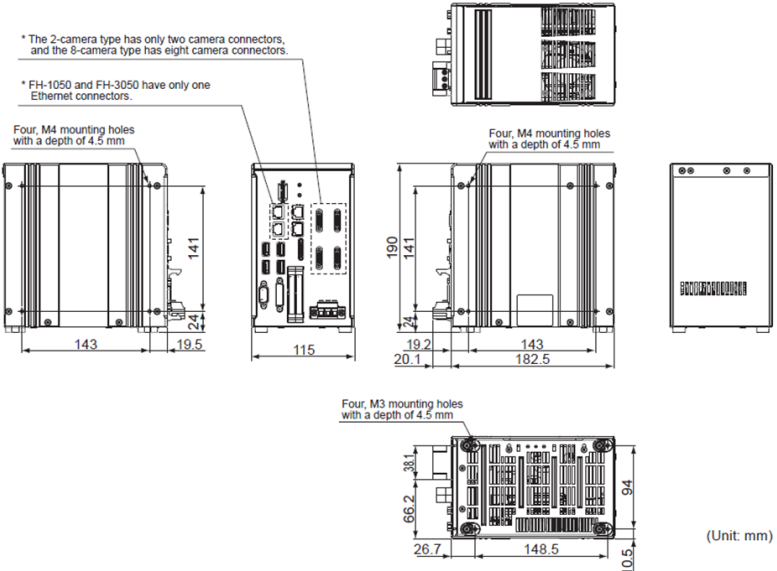
Product discontinuation Model FH-1050 series	Recommendable replacement Model FH-2050 series

	Connector name	Description
(A)	SD memory card installation connector	Install the SD memory card. Do not plug or unplug the SD memory card during measurement operation. Otherwise measurement time may be affected or data may be destroyed.
(B)	Ethernet connector	Connect an Ethernet device.
(C)	USB connector	Connect a USB device. Do not plug or unplug it during measurement. ※Right ports of FH-5050 support USB 3.0
(D)	RS-232C connector	Connect an external device such as a PLC.
(E)	DVI-I connector	Connect a monitor.
(F)	I/O(Parallel) connector (control lines, data lines)	Connect the controller to external devices such as a sync sensor and PLC.
(G)	EtherCAT address setup volume	Used to set a station address (00 to 99) as an EtherCAT communication device.
(H)	EtherCAT communication connecctor(IN)	Connect the opposed EtherCAT device.
(I)	EtherCAT communication connecctor(OUT)	Connect the opposed EtherCAT device.
(J)	Encoder connector	Connect an encoder.
(K)	Camera connector	Connect cameras
(L)	Power supply terminal connnector	Connect a DC power supply. Wire the FH Sensor Controller inspendently on other devices. Wire the ground line. Be sure to ground the FH Sensor Controller alone. Use an attachment power terminal (male) for installation. For detailes, refer to "Vision System Hardware Setup Manual" *5-3 Sensor Controller Instllation on page 5-5*.

[Mounting dimensions]

Product discontinuation Model FH-1050 series	Recommendable replacement Model FH-2050 series

● Side Mounting

(Unit: mm)

· Left side
4-M4 depth 4.5 (mounting screw hole)

· Right side
4-M4 depth 4.5 (mounting screw hole)

141, 24, 143, 19.5, 190, 141, 24, 19.2, 143, 20.1, 182.5

* Recommended tightening torque: 1.2 N·m to 1.3 N·m
* The tolerance is ±0.2 mm.

● Bottom Mounting

· Bottom
4-M3 depth 4.5 (mounting screw hole)   Insulating leg: 4

(Unit: mm)

38.1, 66.2, 94, 26.7, 148.5, 10.5

* Do not remove the Insulating leg. Fix the Insulating leg to secure the ventilation path.
* Recommended tightening torque: 0.54 N·m to 0.6 N·m
* The tolerance is ±0.2 mm.

[Dimensions]

Product discontinuation Model FH-1050 series	Recommendable replacement Model FH-2050 series

* The 2-camera type has only two camera connectors, and the 8-camera type has eight camera connectors.

* FH-1050 and FH-3050 have only one Ethernet connectors.

Four, M4 mounting holes with a depth of 4.5 mm

Four, M4 mounting holes with a depth of 4.5 mm

141, 24, 143, 19.5, 115, 190, 141, 24, 19.2, 143, 20.1, 182.5

Four, M3 mounting holes with a depth of 4.5 mm

38.1, 66.2, 94, 26.7, 148.5, 10.5

(Unit: mm)

[Specification]

Item		Product discontinuation			Recommendable replacement		
		Model FH-1050 series			Model FH-2050 series		
Model		FH-1050	FH-1050-10	FH-1050-20	FH-2050	FH-2050-10	FH-2050-20
Controller type		BOX type					
Parallel IO polarity		NPN/PNP(common)					
Opera-tion Mode	Standard	Yes					
	Double Speed Multi-input	Yes					
	Non-stop adjustment mode	Yes					
	Multi-line random-trigger mode	Yes(Maximum 8 line)[*1]					
Parallel Processing		Yes					
Number of Connectable Camera		2	4	8	2	4	8
Supported Camera	FH-S series camera	FH-S series cameras except FH-SM21R/SC21R are connectable.		FH-S series cameras except FH-SM21R/ SC21R are connect-able. [*2]	All of the FH-S series cameras are connectable.		All of the FH-S series cameras are connect able.[*2]
	FZ-S series camera	All of the FH-S series cameras expect are connectable.					
Camera I/F		OMRON I/F					
Possible Number of Captured Images		Refer to *About Number of Logging Images* or *About Max. About Number of Logging Images during Multi-input* in the *Vision System FH/FHV series User's manual (Cat.No. Z365).*					
Possible Number of Logging Images to Sensor Controller							
Possible Number of Scenes		128					
Operating on UI	USB Mouse	Yes (wired USB and drivers is unnecessary type)					
	Touch Panel	Yes(RS-232C/USB connection: FH-MT12)					
Setup		Create the processing flow using Flow editing					
Language		Japanese, English, Simplified, Chinese, Traditional Chinese, Korean, German, French Spanish, Italian, Vietnamese, Polish					

Item		Product discontinuation			Recommendable replacement		
		Model FH-1050 series			Model FH-2050 series		
Model		FH-1050	FH-1050-10	FH-1050-20	FH-2050	FH-2050-10	FH-2050-20
Serial communication		RS-232C x1					
Ether-net comm-unicat-ion	Protocol	Non-procedure(TCP/UDP)					
	I/F	1000BASE-T × 1	1000BASE-T × 2				
EtherNet/IP Communication		Yes(Target/Ethernet port）					
PROFINET Communication		• Yes(Slave / Ethernet port) • Conformance class A					
Parallel I/O		12 inputs/31 outputs:Use 1Line. Operation mode: Expect Multi-line random-trigger mode. 17 inputs/37 outputs:Use 2Line. Operation mode: Expect Multi-line random-trigger mode. 14 inputs/29 outputs:Use 3 to 4 Line. Operation mode: Expect Multi-line random-trigger mode. 19 inputs/34 outputs:Use 5 to 8 Line. Operation mode: Expect Multi-line random-trigger mode.					
Encoder Interface		Input voltage: 5V±5% Signal: RS-422A Line Driver Level Phase A/B/Z: 1MHz					
Monitor Interface		DVI-I output（Analog RGB & DVI-D single link） x 1					
USB I/F		USB2.0 host x 4 (BUS Power: 5 V/0.5 A per port)			USB2.0 host x 2 (BUS Power: 5 V/0.5 A per port) USB3.0 host x 2 (BUS Power: 5 V/0.9 A per port)		
SD Card I/F		SDHC x 1					
Indicator Lamps	Main	POWER: Green ERROR: Red RUN: Green ACCESS: Yellow					
	Ethernet	NET RUN: Green LINK/ACT: Yellow	NET RUN1: Green LINK/ACT1: Yellow NET RUN2: Green LINK/ACT2: Yellow				
	SD Card	SD POWER: Grren SD BUSY: Yellow					
	EtherCAT	ECAT RUN: Grren LINK/ACT IN: Green LINK/ACT OUT: Green ECAT ERR: Red					
Supply Voltage		20.4VDC to 26.4VDC					

Item		Product discontinuation			Recommendable replacement		
		Model FH-1050 series			Model FH-2050 series		
Model		FH-1050	FH-1050-10	FH-1050-20	FH-2050	FH-2050-10	FH-2050-20
Current consumption	When connecting an intelligent compact digital camera When connecting the following lighting or lighting controllers without an external power supply - FLV-TCC1 - FLV-TCC4 - FLV-TCC3HB - FLV-TCC1EP - FL-TCC1 When connecting the following lighting or lighting controllers - FL-TCC1PS - FL-MD□MC	4.7A max.	6.5A max.	10.9A max.	4.6A max.	6.6A max.	11.2A max.
	Other than above	3.6A max.	4.3A max.	6.2A max.	3.5A max.	4.3A max.	6.3A max.
Built-in FAN		Yes					
Usage Environment	Ambient temperature range	Operating: 0°C 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)					
	Ambient atmosphere	No corrosive gases					
	Vibration tolerance	Oscillation frequency: 10 to 150 Hz, Half amplitude: 0.1mm, Acceleration: 15m/s^2 Sweep time: 8minutes/count, Sweep count: 10, Vibration direction: up and down/front and behind/left and right					
	Shock resistance	Impact force: 150m/s^2 Test direction: up and down/front and behind/left and right					
	Noise immunity — Fast Transient Burst	• DC power Direct infusion: 2 kV, Pulse rising: 5 ns, Pulse width: 50 ns, Burst continuation time: 15 ms/0.75 ms, Period: 300 ms, Application time: 1 min. • I/O line Direct infusion: 1 kV, Pulse rising: 5 ns, Pulse width: 50 ns, Burst continuation time: 15 ms/0.75 ms, Period: 300 ms, Application time: 1 min.					
	Grounding	Class D grounding(100Ω or less grounding resistance)[3]					
Ex	Dimensions	190 mm x 115mm x 182.5mm Note Height: Including the rubberat the base.					

Item	Product discontinuation			Recommendable replacement		
	Model FH-1050 series			**Model FH-2050 series**		
Model	FH-1050	FH-1050-10	FH-1050-20	FH-2050	FH-2050-10	FH-2050-20
Weight	Approx. 3.2 kg	Approx. 3.4 kg	Approx. 3.4 kg	Approx. 3.4 kg	Approx. 3.6 kg	Approx. 3.6 kg
Degree of protection	IEC60529 IP20					
Case material	Cover: zinc-plated steel plate, Side plate: aluminum (A6063)					

*1. According to CPU performance, FH-1050 series and FH-2050 series are recommended to use up to two lines in this mode.
*2. Up to eight cameras can be connected in total including up to four 12 or 20.4 Megapixel cameras.
*3. Existing the third class grounding

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.