

Product Discontinuation

Vision Systems



FH-L550
FH-L550-10

Recommended Replacement

Vision Systems

FH-L551
FH-L551-10



[Final order entry date]

The end of September, 2024

[Date of The Last Shipping]

The end of July, 2025

[Scheduled date of maintenance close]

The end of March, 2030

[Caution on recommended replacement]

Processing performances such as processing time of processing item and communication response time will change because of replacement with the recommended replacement.

The operation of the equipment may be affected by it.

When replacing, please check the operation of the equipment.

About available application software versions

Only Ver.6.51 or later application software can be used with the recommended replacement.

Do not downgrade it to Ver.6.40 or earlier version.

If you are using customization software

Customized software designed for the product discontinuation cannot be operated with F the recommended replacement. Please contact our sales department.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
FH-L551	**	**	**	**	*	*	**
FH-L551-10	**	**	**	**	*	*	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

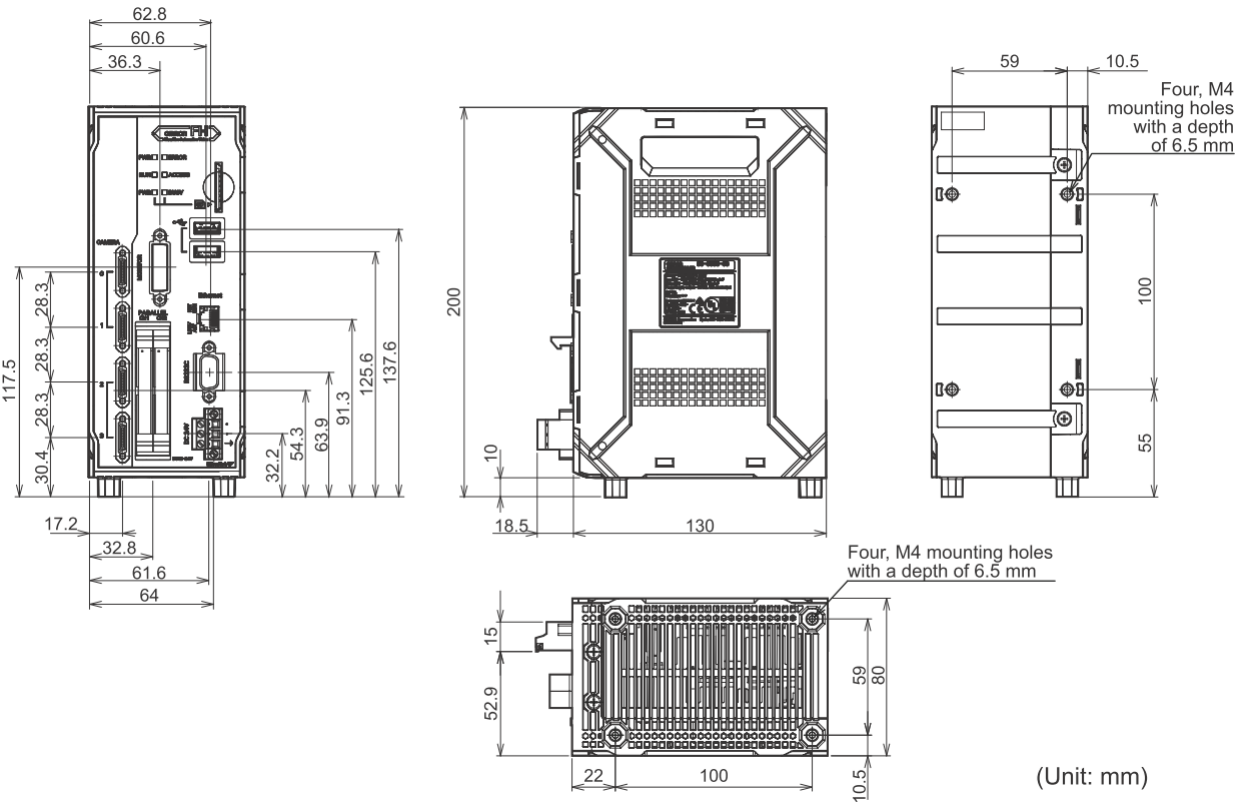
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
FH-L550	FH-L551
FH-L550-10	FH-L551-10

[Body color]

Product discontinuation Model FH-L550-[]	Recommendable replacement Model FH-L551-[]
<p>Model FH-L550-[] / Model FH-L551-[] Black</p> 	

[Dimensions]

Product discontinuation Model FH-L550-[]	Recommendable replacement Model FH-L551-[]
<p>Model FH-L550-[] / Model FH-L551-[] 200 mm x 80 mm x 130 mm</p>  <p>(Unit: mm)</p>	

[Wire connection]

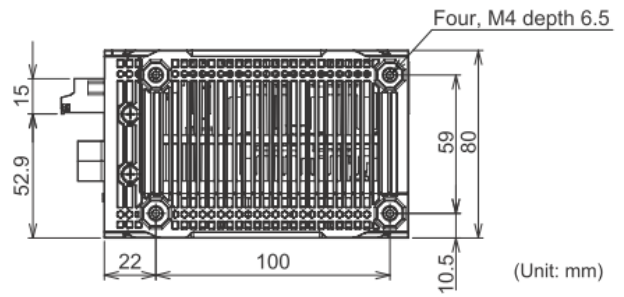
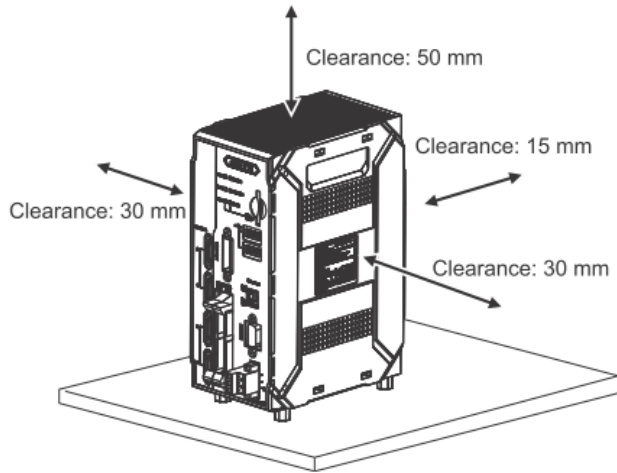
Product discontinuation Model FH-L550-[]	Recommendable replacement Model FH-L551-[]		
Model FH-L550-[] / Model FH-L551-[]			
<p>The diagram shows the rear panel of the FH Sensor Controller with various connectors labeled (A) through (I). (A) is the SD memory card installation connector. (B) is the USB2.0 connector. (C) is the USB3.0 connector. (D) is the Ethernet connector. (E) is the RS-232C connector. (F) is the Monitor connector. (G) is the I/O (Parallel) connector. (H) is the Camera connector. (I) is the Power supply terminal connector. Other labels include CAMERA, MONITOR, PARALLEL I/O, DC 24V, and 0V.</p>	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)	USB2.0 connector	Connects to USB 2.0. Do not plug or unplug it during measurement. Otherwise measurement time may be affected or data may be destroyed.
	(C)	USB3.0 connector	Connects to USB 3.0. Do not plug or unplug it during measurement. Otherwise measurement time may be affected or data may be destroyed.USB 3.0 has a high ability to supply the bus power. Use the Sensor Controller by combining USB 3.0, faster transport can be realized.
	(D)	Ethernet connector	Connect an Ethernet device.Ethernet port, EtherNet/IP port, and PROFINET port are sharing use.
	(E)	RS-232C connector	Connect an external device such as a PLC.
	(F)	Monitor connector	Connect a monitor.
	(G)	I/O (Parallel) connector (control lines, data lines)	Connect the controller to external devices such as a sync sensor and PLC.
	(H)	Camera connector	Connect cameras.
	(I)	Power supply terminal connector	Connect a DC power supply. Wire the FH Sensor Controller independently 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 details, refer to 5-3 <i>Sensor Controller Installation</i> on page 5-5.

[Mounting dimensions]

<p>Product discontinuation Model FH-L550-[]</p>	<p>Recommendable replacement Model FH-L551-[]</p>
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Model FH-L550-[] / Model FH-L551-[]

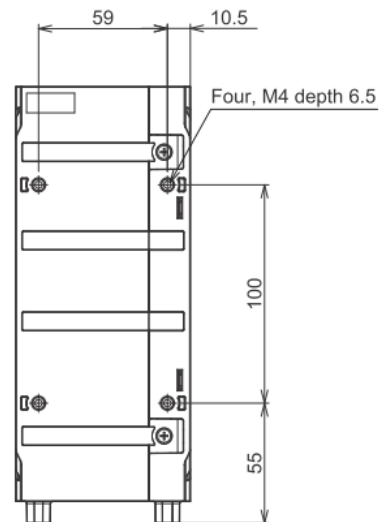
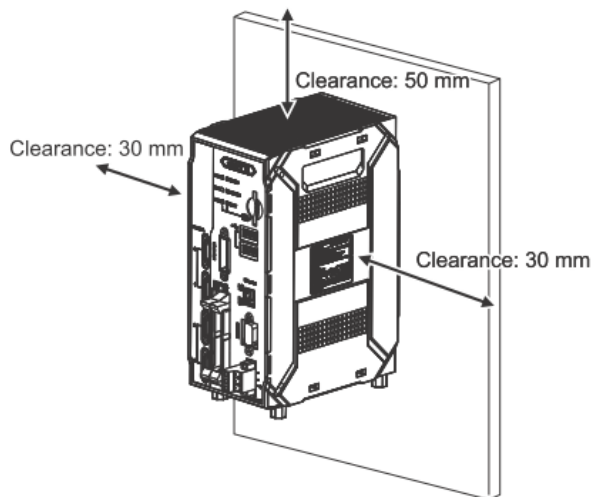
Mounting the base of the Sensor Controller (Floor mounting)



(Unit: mm)

- Recommended tightening torque: 0.54 to 0.6 N•m
- The tolerance: ± 0.2 mm

Mounting of the Back Side



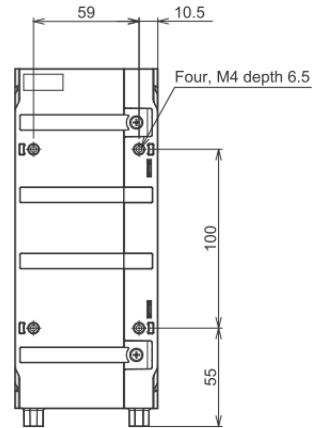
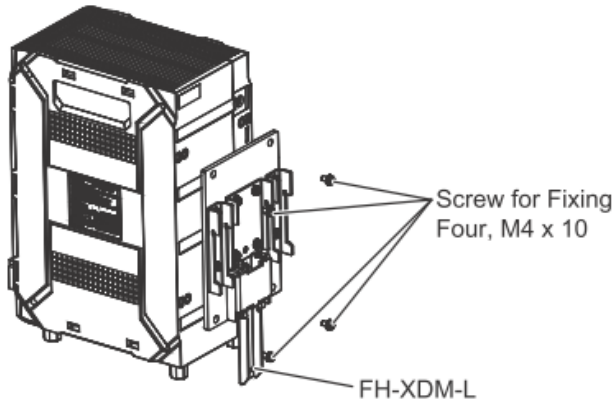
- Recommended tightening torque: 0.54 to 0.6 N•m
- The tolerance: ± 0.2 mm

[Mounting dimensions]

<p>Product discontinuation Model FH-L550-[]</p>	<p>Recommendable replacement Model FH-L551-[]</p>
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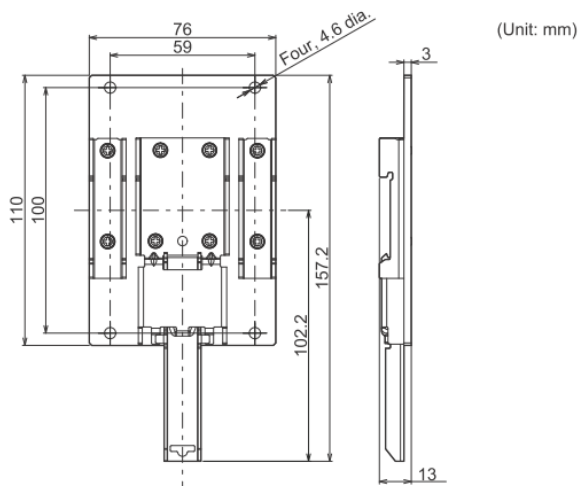
Mounting the DIN rail

Mount DIN rail mounting bracket: FH-XDM-L, to the four mount holes on the back of the Sensor Controller.

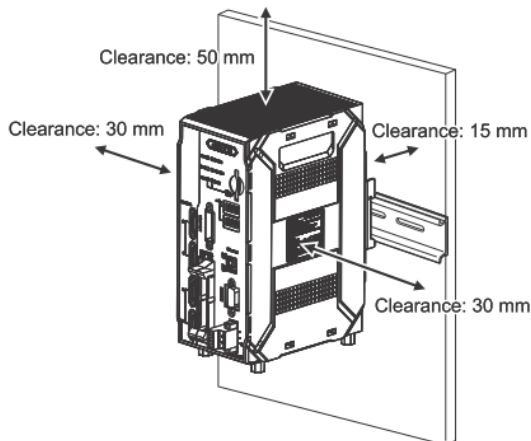


- Recommended tightening torque: 0.54 to 0.6 N·m
- The tolerance: ± 0.2 mm

- Dimensions of DIN rail mounting bracket: FH-XDM-L



- When mounting the DIN rail, for improvement of heat dissipation, install the product in the following orientation only.



[Characteristics]

Item		Product discontinuation Model FH-L550-□		Recommendable replacement Model FH-L551-□	
Model		FH-L550	FH-L551	FH-L551	FH-L551-10
Controller Type		Box type			
Parallel IO polarity		NPN/PNP (common)			
Memory, Storage		4GB RAM, 4GB ROM		4GB RAM, 32GB ROM	
AI Processing Items					
AI Scratch Detect Filter		No			
AI Fine Matching		No		Yes*1	
Main Functions					
Operati on Mode	Standard	Yes			
	Double Speed Multi-input	Yes			
	Non-stop adjustment mode	Yes			
	Multi-line random- trigger mode	No			
Parallel Processing		Yes			
Number of Connectable Camera		2	4	2	4
Support ed Camera	FH-S series camera	FH-S series cameras except FH-SM21R/FH-SC21R are connectable.			
	FZ-S series camera	All of the FZ-S series cameras are connectable.			
Camera I/F		OMRON I/F			
Possible Number of Captured Images		Refer to About Number of Logging Images or About Max. Number of Loading 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			
Operati ng on UI	USB Mouse	Yes (wired USB and driver 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		Japanese, English, Simplified Chinese, Traditional Chinese, Korean, German, French, Spanish, Italian, Vietnamese, Polish	
External Interface					
Serial Communication		RS-232C × 1			
Ethernet Commun ication	Protocol	Non-procedure (TCP/UDP)			
	I/F	1000BASE-T × 1			
EtherNet/IP Communication		Yes (Target/Ethernet port)			
PROFINET Communication		<ul style="list-style-type: none"> • Yes (Slave/Ethernet port) • Conformance class A 			
EtherCAT Communication		None			

Item	Product discontinuation Model FH-L550-□	Recommendable replacement Model FH-L551-□		
Parallel I/O	High-speed input: 1 Normal speed: 9 High-speed output: 4 Normal speed: 23			
Encoder Interface	None			
Monitor Interface	DVI-I output (Analog RGB & DVI-D single link) x 1			
USB I/F	USB2.0 host x 1 (BUS Power: Port 5 V/0.5 A) USB3.0 host x 1 (BUS Power: Port 5 V/0.9 A)			
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			
SD Card	SD POWER: Green SD BUSY: Yellow			
EtherCAT	None			
Supply Voltage	20.4 VDC to 26.4 VDC			
Current consumption				
<ul style="list-style-type: none"> • 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 	2.7A max.	4.4A max.	2.7A max.	4.4A max.
	Other than above	1.5A max.	2.0A max.	1.5A max.
Built-in FAN	None			
Usage Environment				
Ambient temperature range	Operating: 0°C to +55°C Storage: -25 to +70°C (with no icing or condensation)			
Ambient humidity range	Operating and Storage: 10 to 90% (with no condensation)			
Ambient atmosphere	No corrosive gases			
Vibration tolerance	5 to 8.4 Hz with 3.5 mm amplitude, 8.4 to 150 Hz, acceleration of 9.8 m/s ² 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)			
Shock resistance	Impact force: 150 m/s ² Test direction: up and down/front and behind/left and right			

Item		Product discontinuation Model FH-L550-[]	Recommendable replacement Model FH-L551-[]
Noise immunity	Fast Transient Burst	<ul style="list-style-type: none"> • 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 (100 Ω or less grounding resistance) ^{*2}	
External Features			
Dimensions		200 mm x 80 mm x 130 mm	
Weight		Approx. 1.5kg	
Degree of protection		IEC60529 IP20	
Case material		PC	

*1. Be sure to use the 0.3 megapixels camera or the 0.4 megapixels camera.

*2. Existing the third class grounding

[Operation ratings / Operation methods]

Product discontinuation Model FH-L550-[]	Recommendable replacement Model FH-L551-[]
Model FH-L550-[] / Model FH-L551-[] No major changes. For details on how to operate, please refer to the following manual. <ul style="list-style-type: none"> • Vision System User's Manual (Z365) • Vision System User's Manual (Communications Settings) (Z342) • Vision System Hardware Setup Manual (Z366) • Vision System Processing Item Function Reference Manual (Z341) • Vision System Macro Customize Functions Programming Manual (Z367) 	

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.