

NO: BC-010
DATE: April 2015

PRODUCT: V530-R Code Readers
TYPE: Discontinuation Notice

V530-R Fixed Type 2D Code Readers and F150-2D and F160-S2-2D Peripherals to be Discontinued

Last order date: February 2016

Note: Date is subject to change based on raw materials and components availability at the factory.

Product Discontinuation

2D Code Reader (For punch marking)

- Model V530-R160 series**
- Model F150-S1A-2D**
- Model F150-M05L-2D**
- Model F150-KP-2D**
- Model F150-VS-2D**
- Model F150-VM-2D**

2D Code Reader (High performance type)

- Model V530-R2000 series**
- Model F160-S2-2D**



Recommended Replacement

Smart Camera

- Model FQ2-S4xxxx-M**
- No recommended replacement**

Name of products

- Model FQ2-S4xxxx-M**
- No recommended replacement**

Caution on Applying Recommended Replacement

The F150-2D and F160-S2-2D cameras, cables and peripherals cannot be used with FQ2-S4 replacement model. All parts of the code reader system must be replaced.

Affected Parts

Product discontinuation	Recommended replacement
V530-R160	FQ2-S40010F-M
	FQ2-S40050F-M
	FQ2-S40100F-M
	FQ2-S40100N-M
V530-R160E	FQ2-S40010F-M
	FQ2-S40050F-M
	FQ2-S40100F-M
	FQ2-S40100N-M
V530-R160EP	FQ2-S45010F-M
	FQ2-S45050F-M
	FQ2-S45100F-M
	FQ2-S45100N-M

Product discontinuation	Recommended replacement
V530-R2000	FQ2-S40010F-M
	FQ2-S40050F-M
	FQ2-S40100F-M
	FQ2-S40100N-M
V530-R2000P	FQ2-S45010F-M
	FQ2-S45050F-M
	FQ2-S45100F-M
	FQ2-S45100N-M
F160-S2-2D	No recommended replacement
F150-S1A-2D	No recommended replacement
F150-M05L-2D	No recommended replacement
F150-KP-2D 2M	No recommended replacement
F150-KP-2D 5M	No recommended replacement
F150-KP-2D 10M	No recommended replacement
F150-VS-2D 3M	No recommended replacement
F150-VS-2D 5M	No recommended replacement
F150-VS-2D 10M	No recommended replacement
F150-VS-2D 15M	No recommended replacement
F150-VS-2D 20M	No recommended replacement
F150-VS-2D 25M	No recommended replacement
F150-VS-2D 30M	No recommended replacement
F150-VM-2D 2M	No recommended replacement

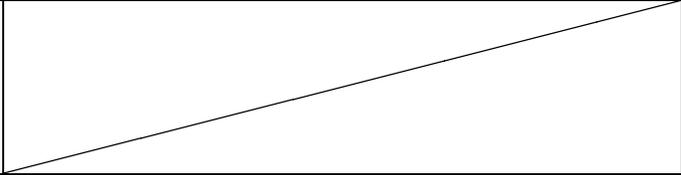
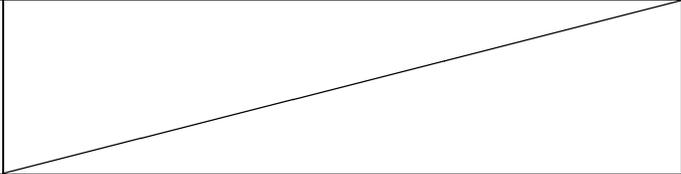
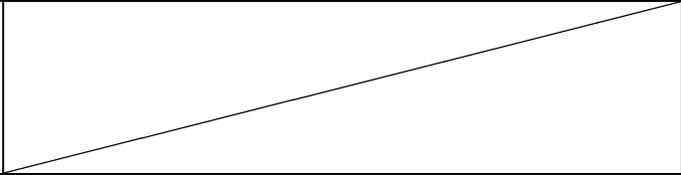
Reference Documentation

Description	Media	Publication number
V530-R160 Fixed 2D Code Reader Brochure	PDF	Q129-E1-1-3
V530-R2000 Fixed 2D Code Reader Brochure	PDF	Q135-E1-01A
FQ2-S4 Datasheet	PDF	Q193-E1-11-2

See the following pages for detail of differences.

Detail of Differences

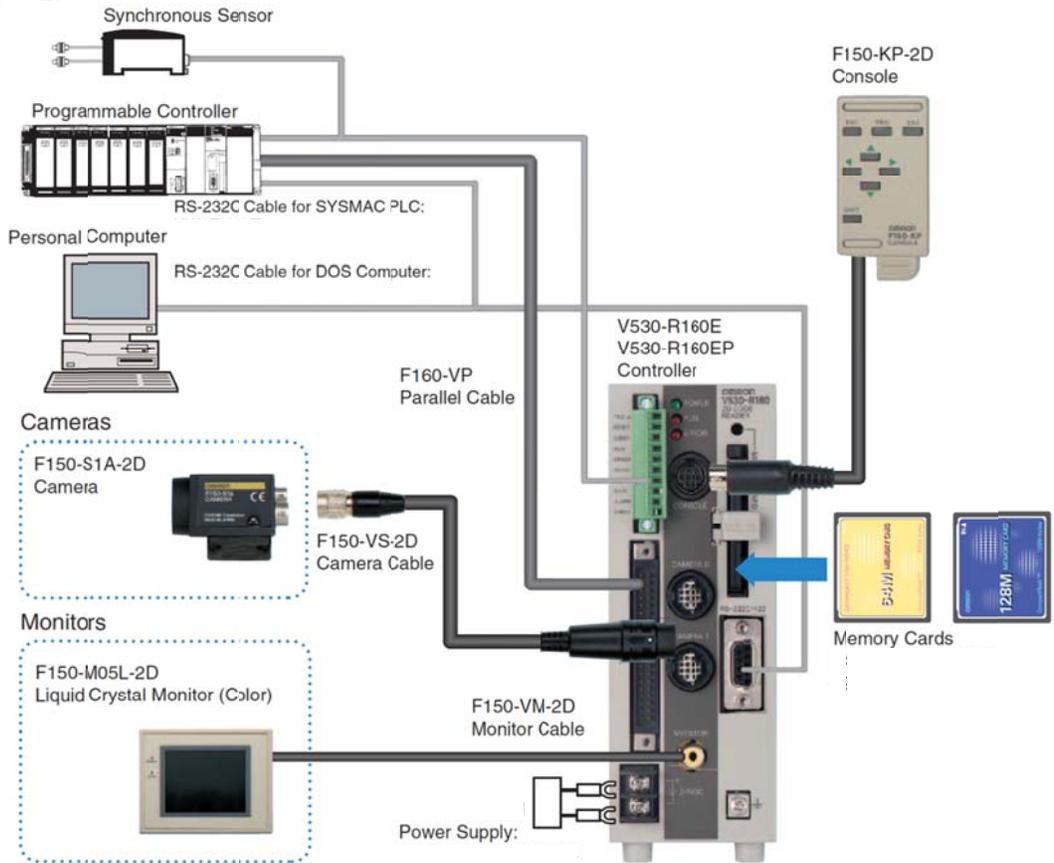
Body Color

<p>Product discontinuation Model V530-R160/R2000 series</p>	<p>Recommended replacement Model FQ2-S4xxxxx-M</p>
<p>Model V530-R160xx Model V530-R2000x</p> 	
<p>Product discontinuation Model F160-S2-2D/F150-S1A-2D</p>	<p>Recommended replacement No recommended replacement</p>
	
<p>Product discontinuation Model F150-M05L-2D</p>	<p>Recommended replacement No recommended replacement</p>
	
<p>Product discontinuation Model F150-KP-2D</p>	<p>Recommended replacement No recommended replacement</p>
	

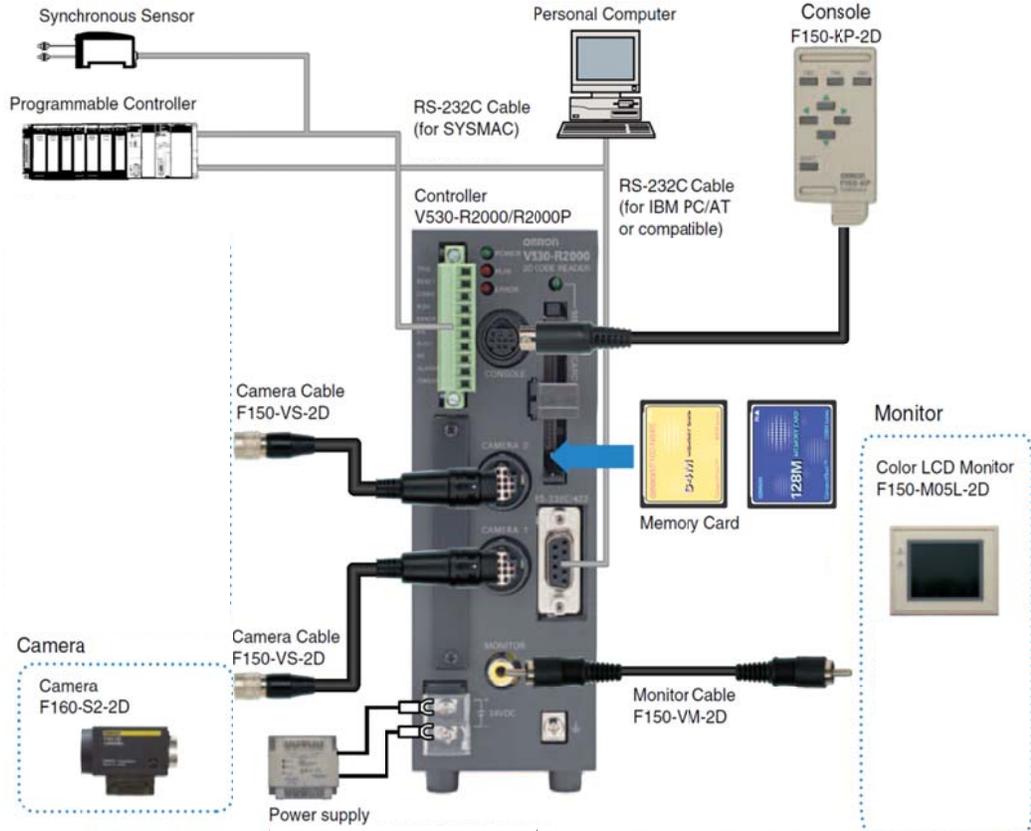
Wire Connection

Product discontinuation Model V530-R160/R2000 series

V530-R160/R160E/R160EP

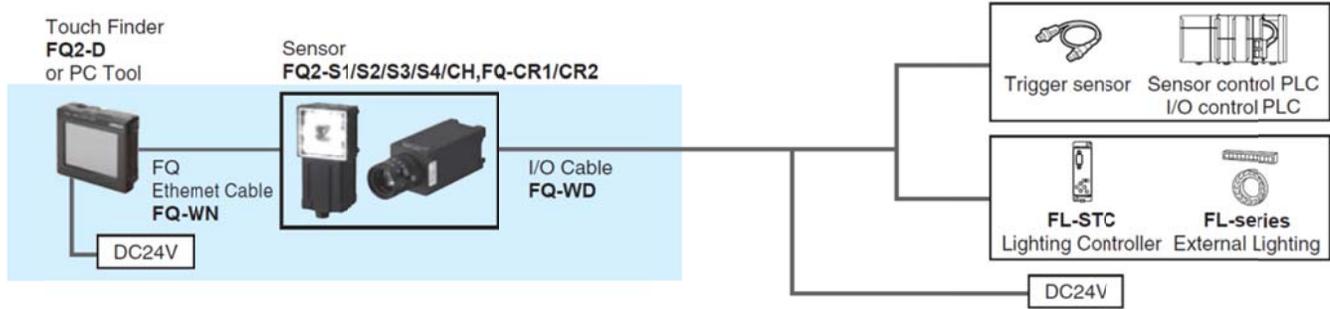


V530-R2000/R2000P

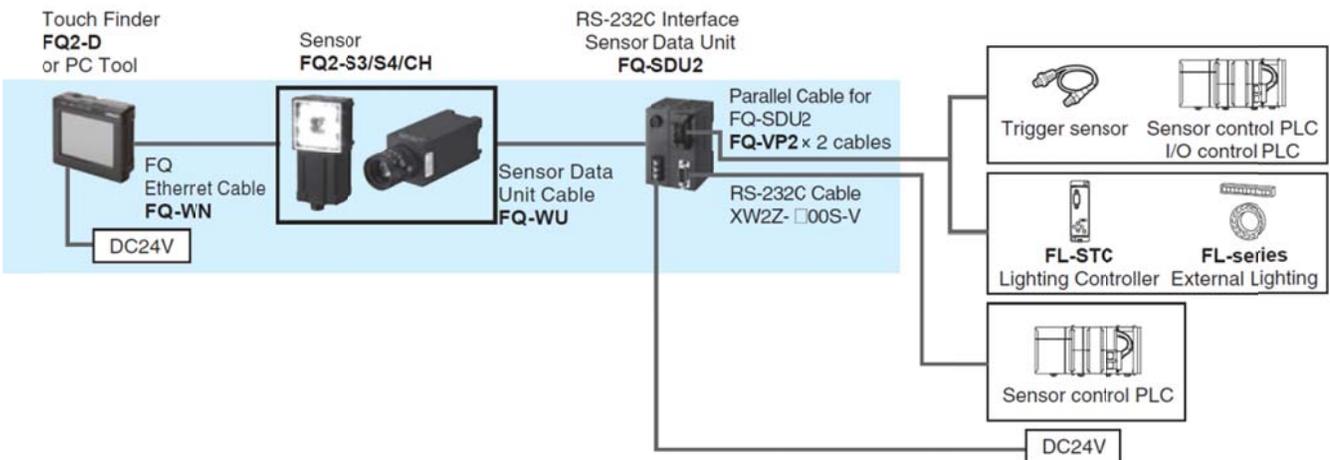


**Recommended replacement
Model FQ2-S4xxxx-M**

Parallel Interface Connection

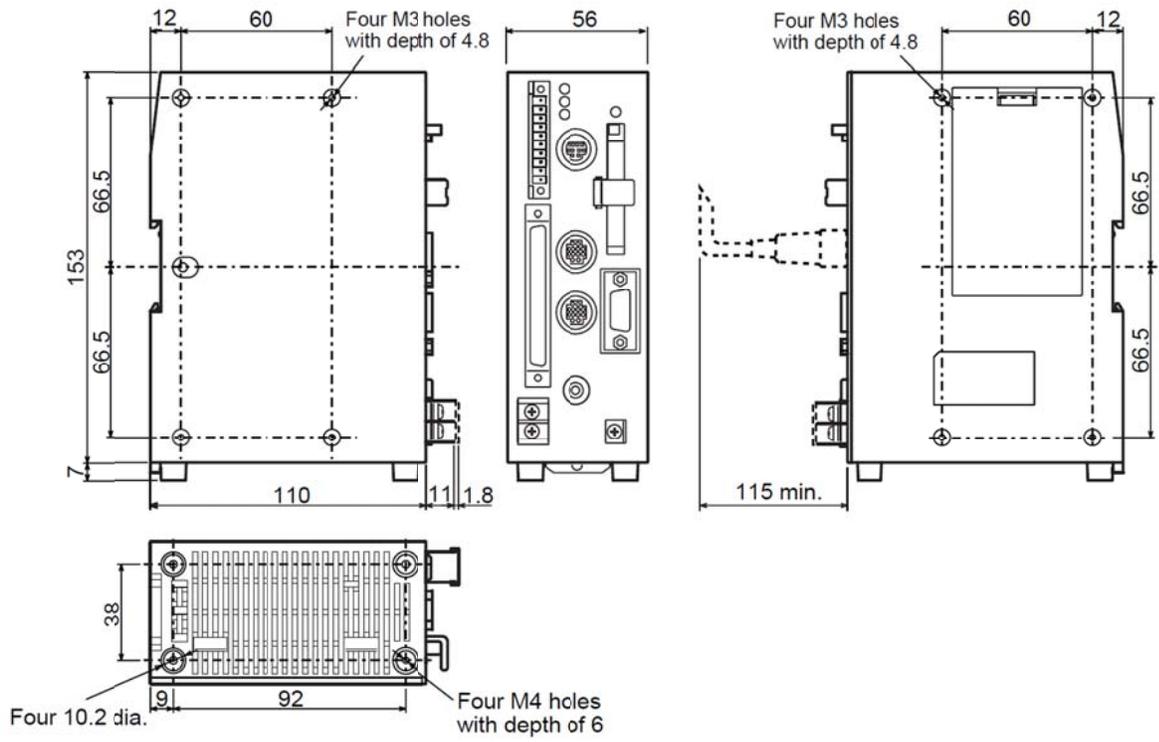


RS-232C Serial Connection



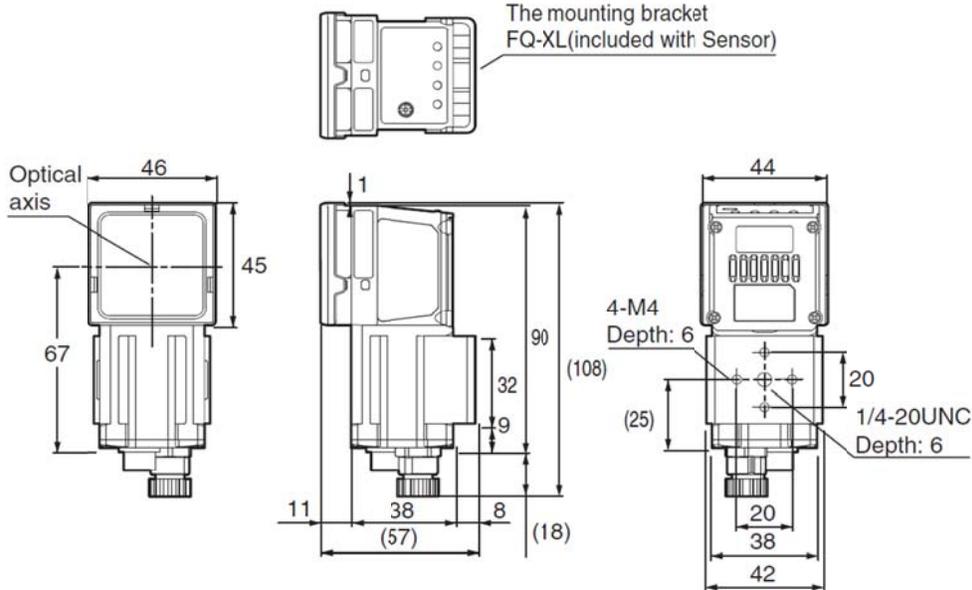
Dimensions

Product discontinuation Model V530-R160xx/R2000x



**Recommended replacement
Model FQ2-S4xxxx-M**

**Narrow View : FQ2-S4xx10F-M
Standard View : FQ2-S4xx50F-M**



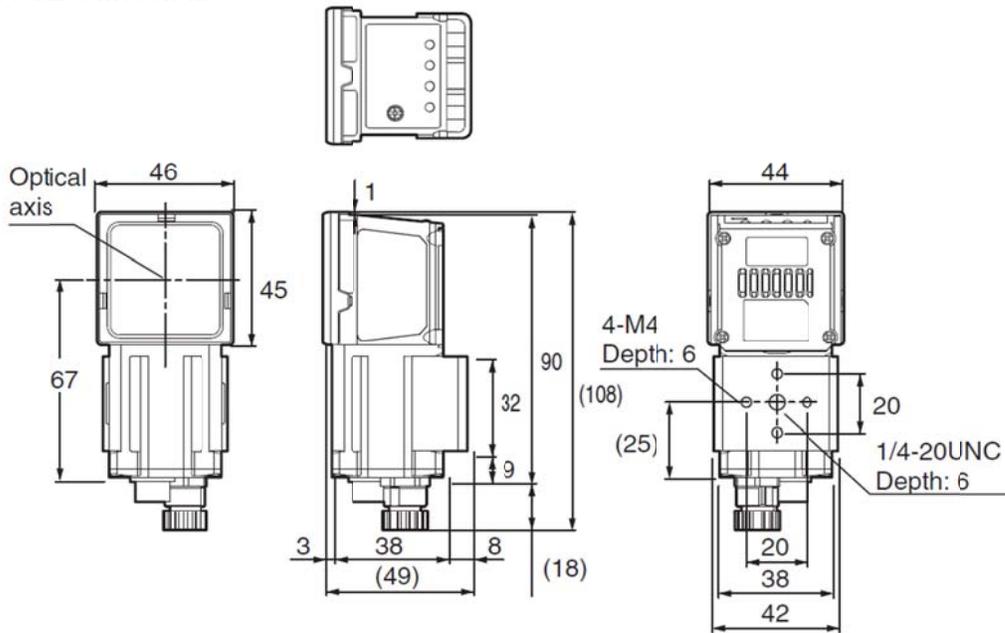
Mounting hole dimensions

Two, 4.5 dia.

20±0.1

Tightening torque: 1.2 N·m

Wide View : FQ2-S4x100x-M



Mounting hole dimensions

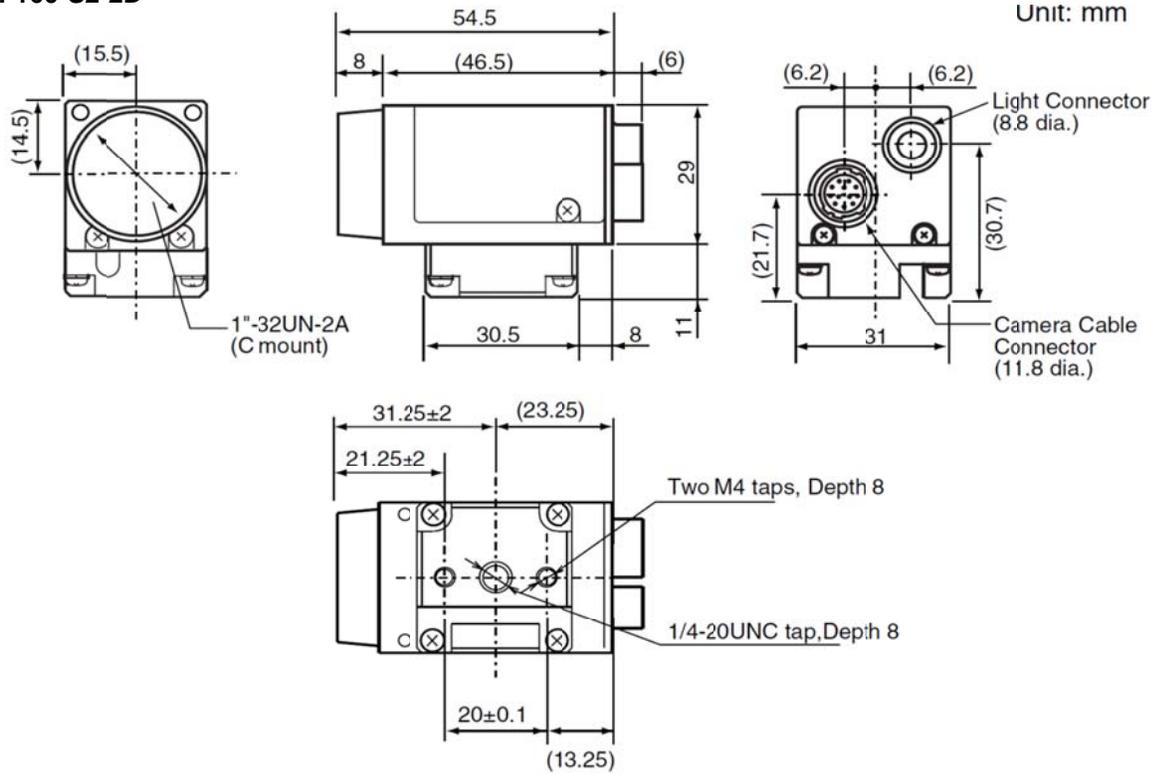
Two, 4.5 dia.

20±0.1

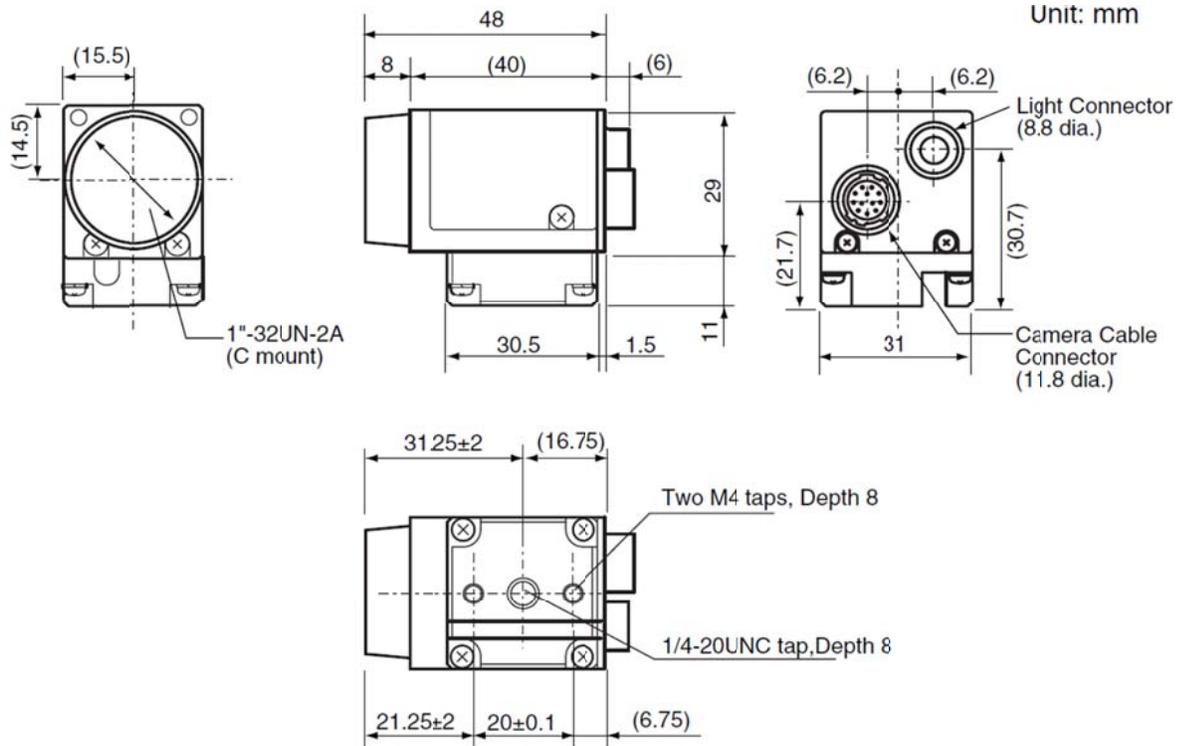
Tightening torque: 1.2 N·m

Product discontinuation
Model F160-S2-2D / Model F150-S1A-2D

Model F160-S2-2D

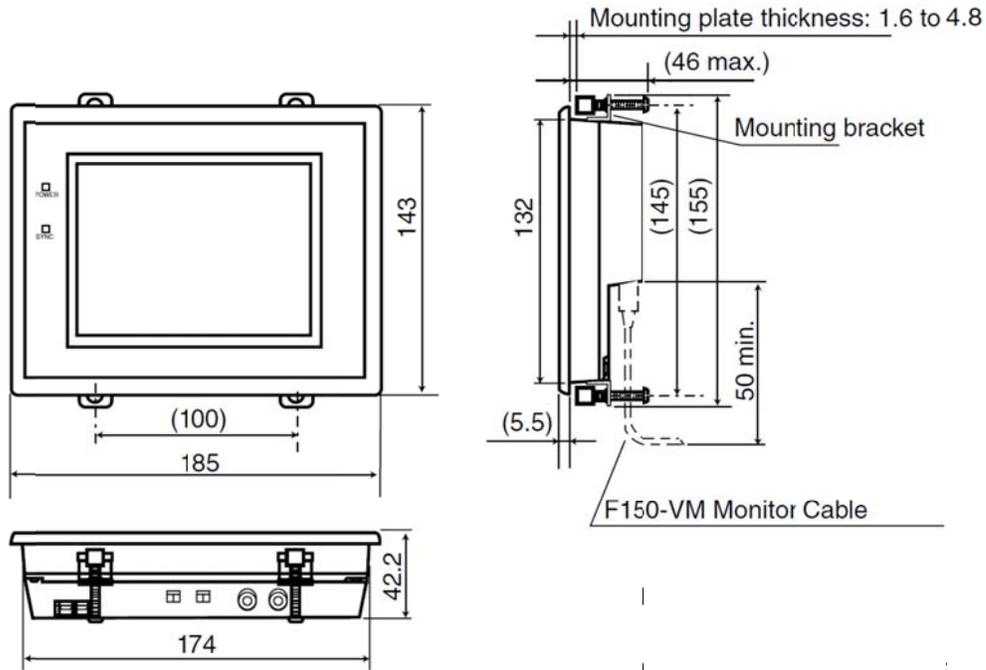


Model F150-S1A-2D



Recommended replacement
No recommended replacement

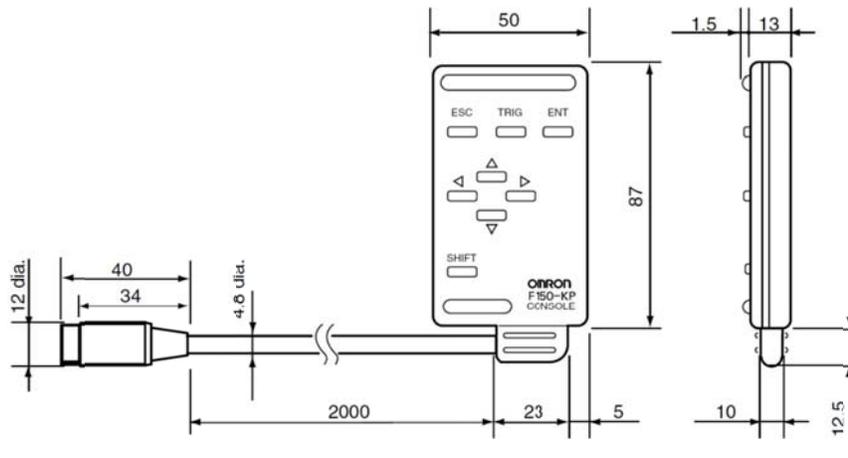
**Product discontinuation
Model F150-M05L-2D**



**Recommended replacement
No recommended replacement**

**Product discontinuation
Model F150-KP-2D**

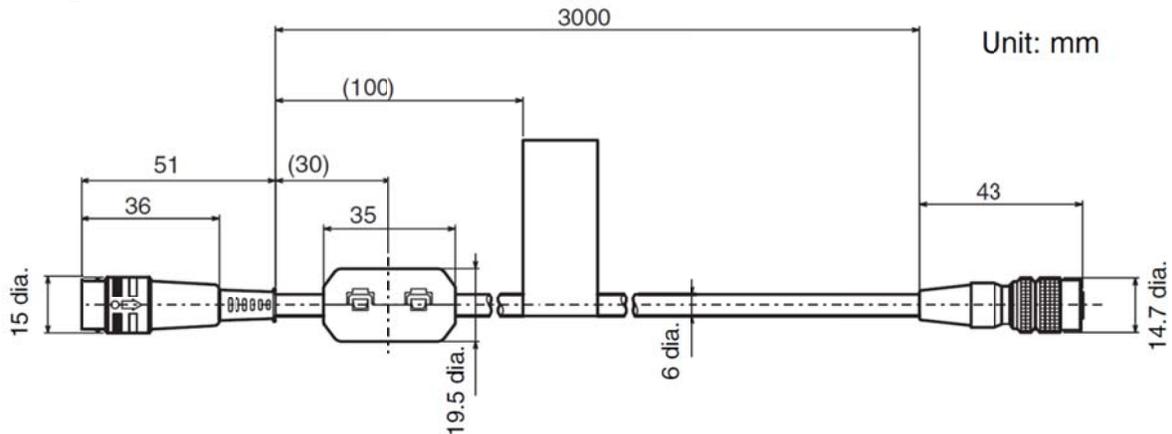
Cable Length : 2m



**Recommended replacement
No recommended replacement**

**Product discontinuation
Model F150-VS-2D**

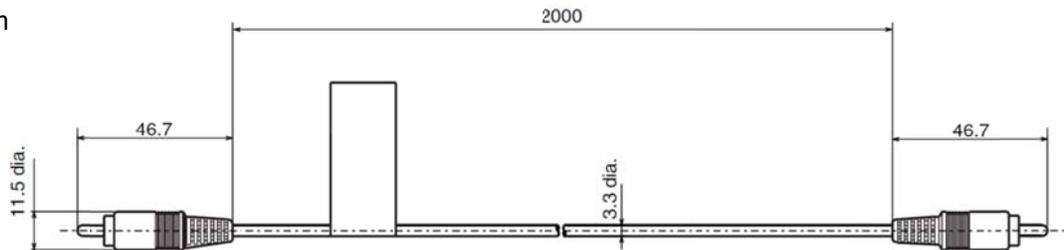
Ex.) Cable Length: 3m



**Recommended replacement
No recommended replacement**

**Product discontinuation
Model F150-VM-2D**

Ex.) Cable Length: 2m



**Recommended replacement
No recommended replacement**

Mounting Dimensions

Recommended replacement

Field of view	Narrow View	Standard View	Wide View (Long-distance)	Wide View (Short-distance)
Number of pixels	350,000 pixels			
NPN	FQ2-S40010F-M	FQ2-S40050F-M	FQ2-S40100F-M	FQ2-S40100N-M
PNP	FQ2-S45010F-M	FQ2-S45050F-M	FQ2-S45100F-M	FQ2-S45100N-M
Field of view/ Installation distance				

Characteristics

Item		Product discontinuation		Recommended replacement
I/O Type	NPN	V530-R160/R160E	V530-R2000	FQ2-S40xxxx-M
	PNP	V530-R160EP	V530-R2000P	FQ2-S45xxxx-M
Applicable 2D codes		Data Matrix ECC200:10×10 to 64X64, 8X18, 8X32, 12X26, 12X36, 16X36, 16X48 Data Matrix (ECC000, ECC050, ECC080, ECC100, ECC140): 9X9 to 25X25 QR Code (Model 1, 2): 21X21 to 41X41 (Version 1 to 6)	Data Matrix ECC200 10X10 to 64X64 8X18 to 16X48, QR Code (Model 1, 2) Ver.1 to 10	Data Matrix (EC200), QR Code, Micro-QR Code, PDF417, MicroPDF417, GS1-DataMatrix
Inspection items		--		Search, shape search II, sensitive search, area, color data, edge position, edge pitch, edge width, labeling. OCR, Bar code, 2D-code, 2D-code (DMP), and Model dictionary
No. simultaneous measurements		--		32
Readable direction		360°		Position compensation (360° Model position compensation, Edge position compensation)
Image elements		--		1/3-inch Monochrome CMOS
Shutter		--		Built-in lighting ON: 1/250 to 1/50,000s
Lighting method		--		Pulse
Lighting color		--		White
Processing resolution		512 (H) X 484 (V)		752 (H) X 480 (V)
No. connectable cameras		2 max.		--
Connectable camera		F150-S1A-2D	F160-S2-2D	--
Image memory function		Maximum of 35 images stored (internal memory in Controller).		In Sensor: 20 images (If a Touch Finder is used, images can be saved up to the capacity of an SD card.)
Operation method		Selected from menu.		
Processing method		Monochrome Gray		
CF Card I/F		1 slot		-
Monitor I/F		Composite video output: 1 channel (Monochrome/Color)		-
Ethernet specifications		—		100BASE-TX/10BASE-T
Serial communications		RS-232C/422A 1 channel		Possible by connecting FQ-SDU2_ Sensor Data Unit.
Parallel I/O		5 inputs and 6 outputs	2 inputs 5 outputs	Possible by connecting FQ-SDU1_ Sensor Data Unit.
Power supply voltage		20.4 to 26.4 VDC		21.6 to 26.4 VDC (including ripple)
Current consumption		Approx. 1.6A max.		Approx. 2.4A max.
Ambient Temperature		Operating: 0 to 50°C Storage: -25 to 65°C (with no icing or condensation)		Operating: 0 to 40°C Storage: -25 to 65°C (with no icing or condensation)
Ambient humidity		Operating and storage: 35% to 85% RH (with no condensation)		
Weight		Approx. 570g		Narrow View/Standard View:Approx.160 g Wide View:Approx.150 g

Item	Product discontinuation		Recommended replacement No recommended replacement
	F160-S2-2D	F150-S1A-2D	
Color/Monochrome	Monochrome		
Current consumption	Approx. 1.7W Max.	Approx. 1.2W Max.	
Vibration resistance	10 to 150Hz, one-side amplitude 0.35mm (Max. acceleration 50m/s ²) 10 times for 8 minutes for each three directions		
Shock resistance	150m/s ² : 3 times each in 6 directions		
Ambient temperature	Operating: 0 to 50°C Storage: -25 to 65°C (with no icing or condensation)		
Ambient humidity	Operating and storage: 35% to 85% (with no condensation)		
Materials	Cover: Galvanized steel sheet metal Case: Die-cast aluminum alloy Camera mounting base: Fiber-reinforced plastic (black)		
Picture element	1/3-inch interline CCD (reading all pixels)		
Effective pixels	659 (H) × 494 (V)		
Synchronization	External sync. via horizontal sync signal		
Shutter speed (Electronic shutter)	1/120, 1/200, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000s	1/100, 1/500, 1/2000, 1/10000s	
Partial function	Supported	Not supported	
Lens mounting	C mount		
Weight	Approx. 85g	Approx. 80g	

Item	Product discontinuation		Recommended replacement No recommended replacement
	F150-M05L-2D		
Panel size	5.7 inches		
Panel type	TFT color liquid crystal		
Resolution	640 X 480 dots		
Contrast	850 : 1 (typical)		
Viewable angle	80° up/down and 60° left/right (with a contrast ratio > 10:1)		
Luminance	400 cd/m ² (typical)		
Backlight	White LED		
Input signal	NTSC composite video (1.0 V/75 Ω termination)		
Power supply voltage	20.4 to 26.4 VDC		
Current consumption	Approx. 0.7A Max.		
Vibration resistance	10 to 150 Hz; half-amplitude: 0.1 mm; maximum acceleration: 15 m/s ² , 10 times for 8 minutes each in 3 directions		
Ambient temperature range	Operating: 0 to 50 °C (with no condensation) Storage: -25 to 65 °C (with no condensation)		
Ambient humidity range	35% to 85% RH (with no condensation)		
Degree of protection	IEC60529 IP20 (in-panel)		
Materials	Case: ABS/PC Display surface: PMMA (Acrylic)		
Weight	Approx. 1kg		

Item	Product discontinuation	Recommended replacement No recommended replacement
	F150-KP-2D	
Vibration resistance	10 to 150 Hz; half-amplitude: 0.15 mm; 4 times for 8 minutes each in 3 directions	
Shock resistance	196 m/s ² ; 3 times each in 6 directions	
Ambient temperature range	Operating: 0 to 50 °C (with no condensation) Storage: -25 to 65 °C (with no condensation)	
Ambient humidity range	35% to 85% RH (with no condensation)	
Ambient environment	No corrosive gases	
Degree of protection	IEC60529 IP20 (in-panel)	
Minimum bending radius	75mm	
Materials	Body: ABS Cable sheathing: Heat-resistant chlorinated vinyl Connector: PC and PBT	
Weight	Approx. 135g	

Item	Product discontinuation	Recommended replacement No recommended replacement
	F150-VS-2D	
Vibration resistance (durability)	10 to 150 Hz; half-amplitude: 0.15 mm, 4 times for 8 minutes each in 3 directions	
Ambient temperature range	Operating: 0 to 50 °C Storage: -25 to 65 °C (with no condensation)	
Ambient humidity range	Operation and storage: 35 to 85% RH (with no condensation)	
Ambient atmosphere	No corrosive gases	
Material	Cable sheathing: Heat-resistant PVC Connector: PC (GF), PBT	
Minimum bending radius	75m	
Weight	3m : Approx. 170g	

Item	Product discontinuation	Recommended replacement No recommended replacement
	F150-VM-2D	
Vibration resistance (durability)	10 to 150 Hz; half-amplitude: 0.15 mm, 4 times for 8 minutes each in 3 directions	
Ambient temperature range	Operating: 0 to 50 °C Storage: -25 to 65 °C (with no condensation)	
Ambient humidity range	Operation and storage: 35 to 85% RH (with no condensation)	
Ambient atmosphere	No corrosive gases	
Materials	Cable sheathing : Heat-resistant chlorinated vinyl Connector: PVC	
Minimum bending radius	50mm	
Weight	2m : Approx. 40g	
Accessories	BNC Jack Adapter	

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.