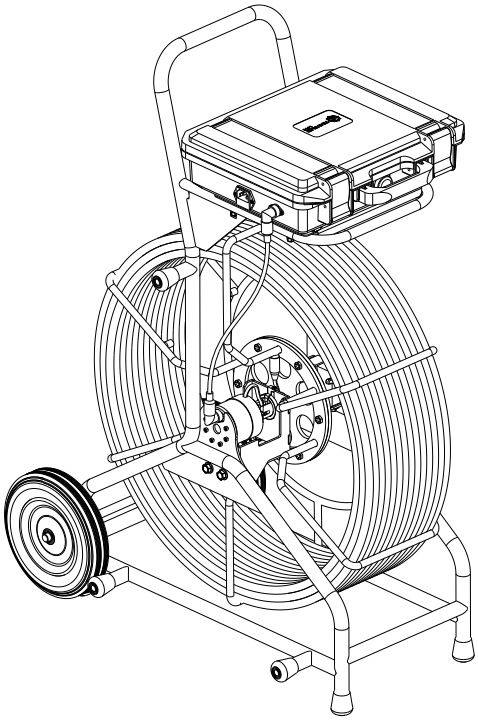
Insight Vision



PRODUCT MANUAL
Opticam XL HD

▶ Read this manual carefully before operating this system

⚠ WARNING

1. Do not operate the device in environments containing flammable or explosive materials (e.g., gas, oil, solvents).
2. Avoid using the device in extremely cold, hot or humid environments; otherwise it may damage the device. Do not drop or press hard on the device.
3. Do not use parts or components from other manufacturers, as they may be incompatible and could damage the system.
4. Warranty invalid if the device is disassembled by users or if there are any physical damages.
5. The fiberglass push cable is very rigid. Do not bend it sharply or apply excessive force, as this may cause breakage.

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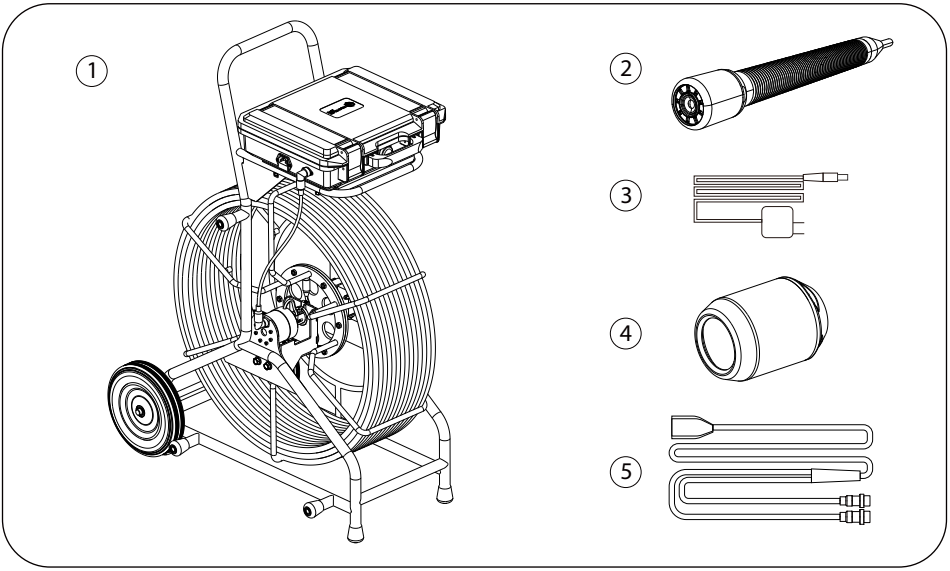
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Product List



(1) Opticam XL HD

(2) Camera head, 40 mm HD

(3) AC power cord

(4) Centering guide

(5) Testing cord HD

Specifications

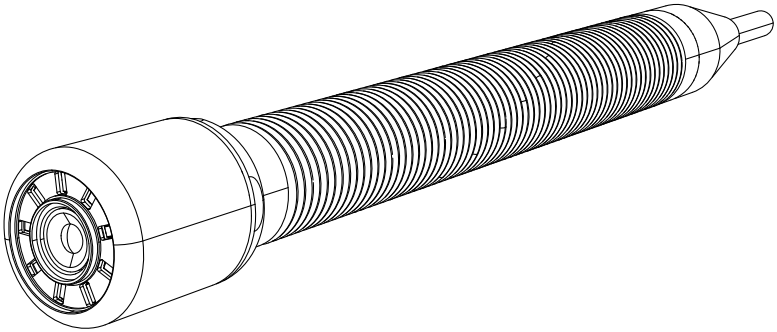
Item	Description
Battery （In the case）	YBG 18650-2S3P, 10.5 Ah, 7.4 V, 77.7 Wh
Battery Life	Up to 8 hours
Cable Length	61M (200FT)
Camera Light	Built-in White LED lights (9 LEDs)
Camera Angle-of-View	120°
Camera Image	960 × 480
System Operating Temperature	-30℃~+70℃

Application:

1. Pipe inspection
2. Waste water system inspection
3. Cable ducting system inspection
4. Ventilation system inspection

WARNING:
Draining the battery completely will reduce the battery capacity.

40mm Camera Head (with self-leveling)



Working environment:

Temperature: -30℃ ～+70℃

Technical specifications:

(1) Power input: DC 9~13V, 3W (max)

(2) Camera module:

1) Image sensor: 1/3 inch CMOS

2) Effective pixel array: 960 (H)x480 (V)

3) White Balance: Automatic

4) Gain Control: Automatic

5) Signal-to-noise ratio: > 52dB (AGC OFF)

6) Video output: 1.0Vp-p/75R

7) Input voltage: DC3.3-5V

8) Current consumption: 110mA

10) Frame rate: 30FPS/25FPS

(3) Light Source:

1) LED quantity: 9 pcs

2) LED brightness: 200LM

3) LED current: 0~200mA

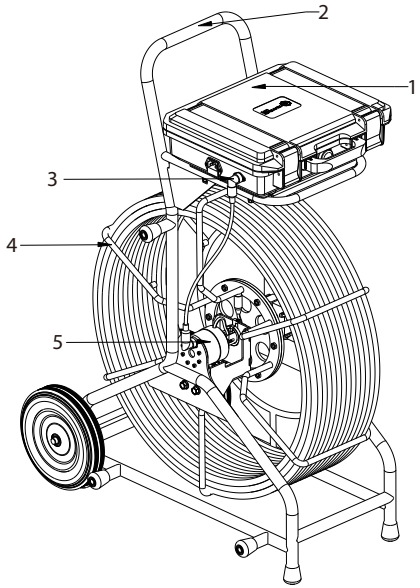
External interface:

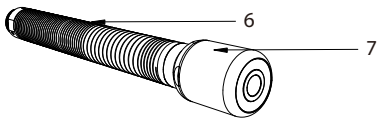
CAM: Pins 1 to 4 are connected to VIDEO, GND, +12V, LED

WARNING:
Continuously using the camera head with the maximum LED intensity may reduce LED life.

Parts & Accessories

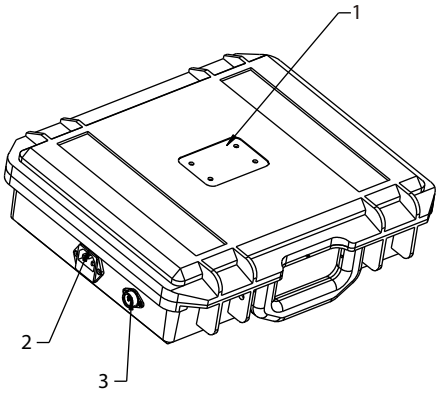
Opticam XL HD

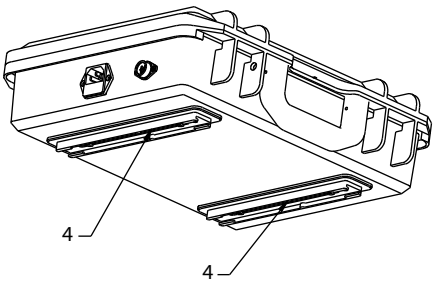




Item	Part Number	Description	Qty.
1	214023	Control box, Opticam XL HD	1
2	64070068	Body frame assembly, Opticam XL HD	1
3	238059	Video cable,Opticam XL HD	1
4	127019	Cable reel w/ cable,Opticam XL HD	1
	127020	Cable reel w/ cable, Opticam XL 300 ft HD	1
5	251004	Slipring & encoder, Opticam XL 200 ft HD	1
6	206021	Flexible link (Stiff) HD	1
7	206023	Camerahead, 40 mm HD	1
	251007	Slipring Encoder,Opticam XL 300ft HD	1

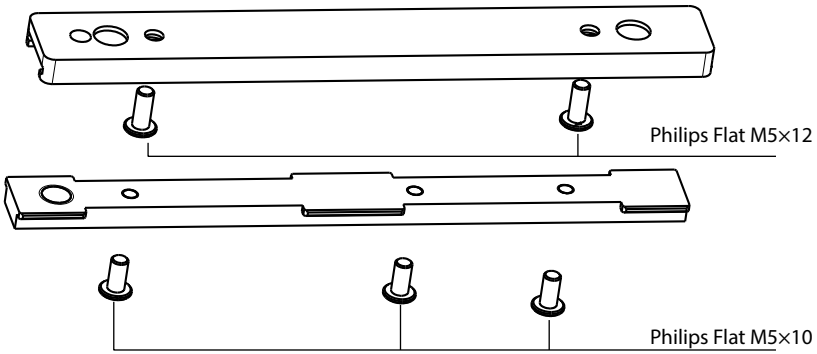
Control Box (214023)



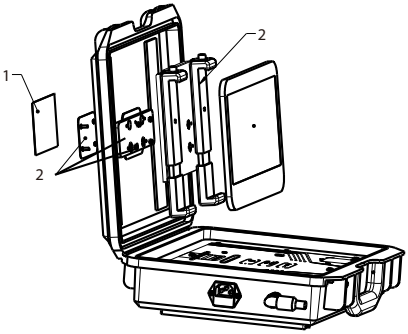


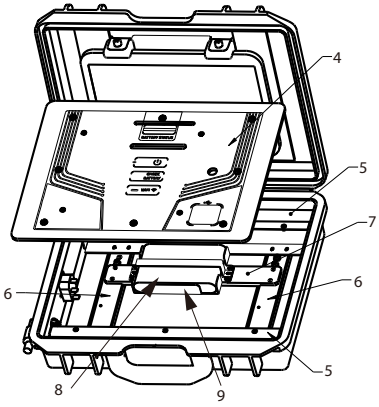
Item	Part Number	Description	Qty.
1	869030	Decal, control box, Opticam XL HD	1
2	64070020	AC receptacle	1
3	64070029	Aviation connector, control box	1
4	64070034	Rail assembly, control box	2

Rail assembly, control box (64070034)



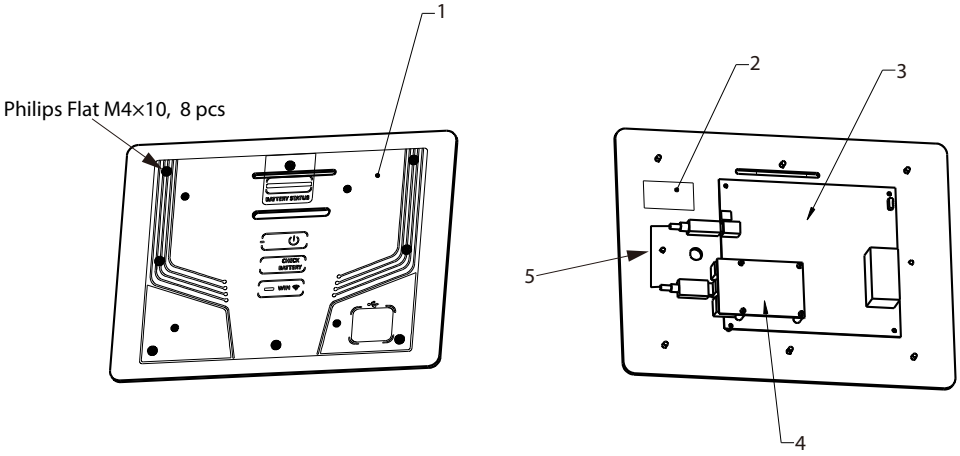
Control Box (inside)





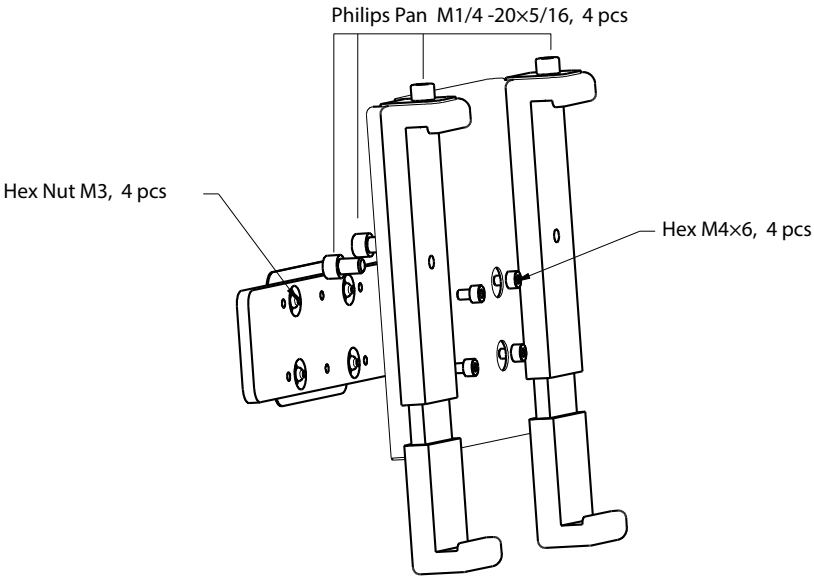
Item	Part Number	Description	Qty.
1	869030	Decal, control box, Opticam XL HD	1
2	64070033	Tablet holder	1
4	243027	Control panel assembly w/ PCBA,Opticam XL HD	1
5	64070016	Control panel stand	2
6	64070018	Vertical bar, control box	2
7	64070019	Horizontal bar, control box	1
8	567012	Battery, Opticam, 6-cell	1
9	225001	Battery holder	1

Control Panel Assembly with PCBA (243027)

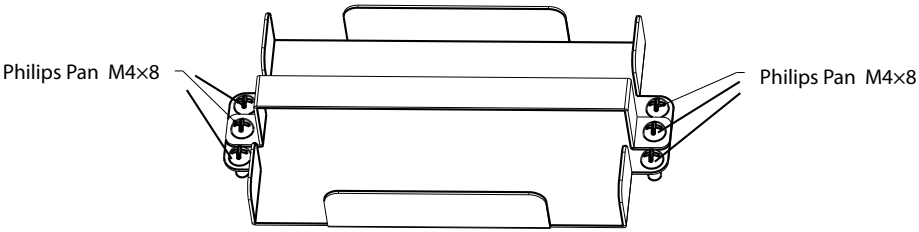


Item	Part Number	Description	Qty.
1	243027	Control panel assembly HD	1
2	64070004	Wi-Fi Antenna	1
3	6407	Interface board, Opticam XL HD	1
4	64070002	Video processing card	1
5	64060036	Cable, USB A to USB B, 100MM	1

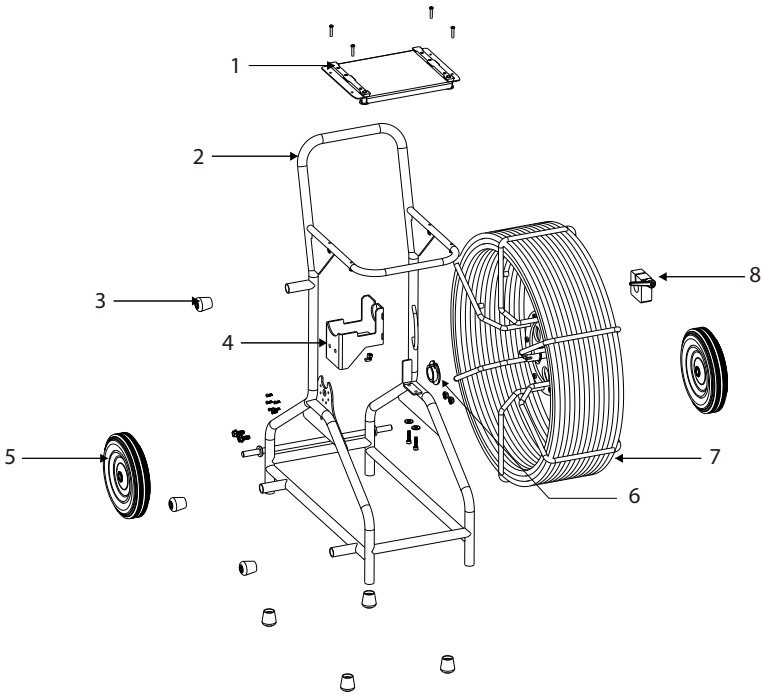
Tablet holder,TL (64070033)



Battery holder, TL (64070017)

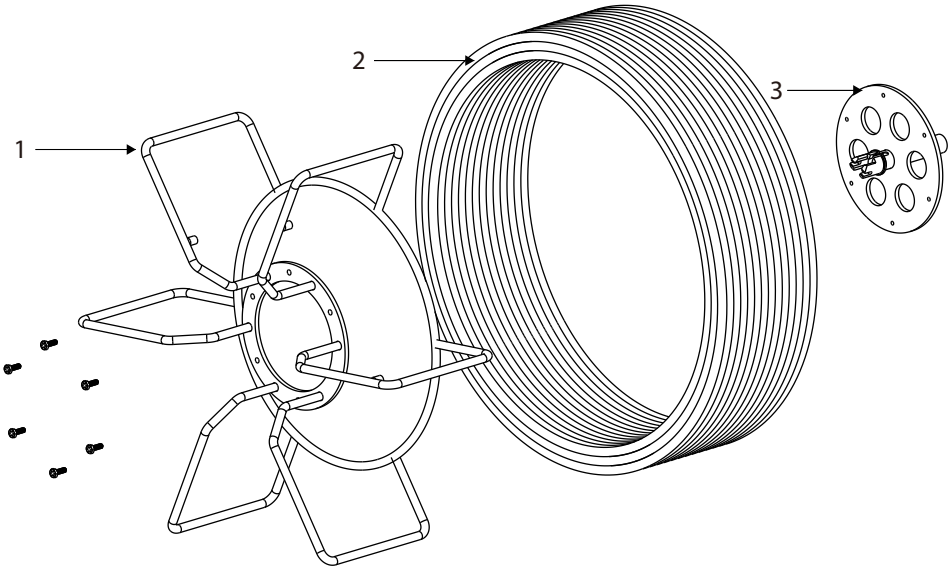


Body frame assembly, OpticamXL HD



Item	Part Number	Description	Qty.
1	259002	Control box mounting plate,Opticam XL HD	1
2	131050	Body frame,Opticam XL HD	1
3	538086	Foot,Opticam XL HD	7
4	131049	Mounting bracket, slipring,Opticam XL HD	1
5	509510	Wheel,Opticam XL HD	2
6	159064	Bronze bearing, reel,Opticam XL HD	1
7	212061	Cable reel w/ cable HD	1
		Opticam XL 300 ft HD	1
8	175080	Brake,Opticam XL HD	1

Cable reel w/ cable (212061),Opticam XL HD



Item	Part Number	Description	Qty.
1	176002	Cable reel, Opticam XL HD	1
2	127017	Pushrod, 9mm, 200 ft HD	1
	127018	Pushrod, 9mm, 300 ft HD	1
3	131048	Hub, cable reel, Opticam XL HD	1



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