# Ultra 3.0

### R1.0

Author	Revision	Changes	Date
Changyu	R1.0	Initial Draft	2025-02-05

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### 1 Introduction

### 1.1 Overall review

Ultra 3.0 is a series of powerful trial camera. It is higher performance and integrated with back up battery for GPS location.

#### 1.2 Main feature

The products support below main feature.

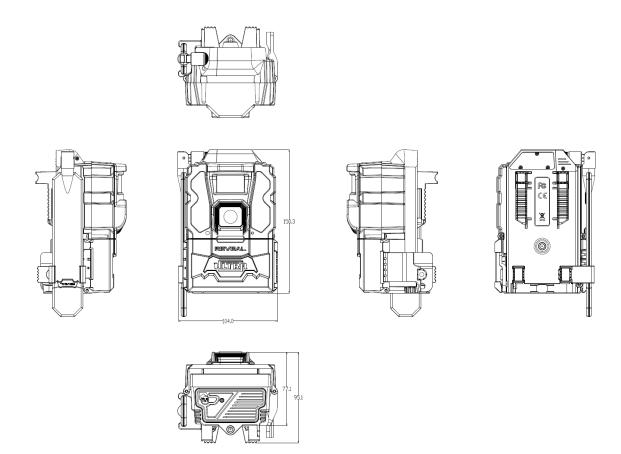
- Connectivity
  - LTE: Cat-1 B2/4/5/12/13/25/26
  - WIFI
  - GNSS
  - BLE
- Camera: 5M
- Codec H.265
- ➢ 2" LCD
- ➢ PIR
- No-Glow and Low-glow IR, can be switch in APP
- Support fully size SD card
- > Type-C connector
- ➤ MIC
- ➤ SIM: x1 E-SIM
- Keys & buttons
- ➤ LEDs
- External antenna: x1 SMA antenna for cellular, 180-degree angle.
- Power supply
  - 12 AA non-rechargeable battery, compatible with the previous product
  - Lithium rechargeable battery packs, compatible with the previous product
  - 12V Solar Panel, compatible with existing product
- ➤ Working temperature and humidity: -25C to +60C, 5%-90%
- ➤ IP Rating: IP66

# 2 ID & MD

2.1 Ultra 3.0 ID

**Size:** 149.75 x 95.01 x 95 mm (60.5 is thickness of the main body)





## 2.2 Interface

Item	Name	Requirement
1	LCD	2" LCD Screen Integrated, with Anti-Glare style screen
2	Camera	5MP
3	PIR	support
4	IR LEDs	4pcs 850nm LEDs for Low Glow and 8pcs 940nm LEDs for No Glow
5	Micro-SD	Support removable Full size SD card
6	USB port	x1, Type-C connector
7	MIC	X1, Microphone
8	Switch button	for ON/Setup/Off
9	Ejection button	for battery pack
10	Keys	Test key (Activate the system)
		Reset key
11	SIM	x1 ESIM for mass production
12	Key and buttons	Power / Enter Button
		Up, Down, Left and Right Arrow Buttons (for LCD Screen navigation)
		Hard reboot button (must require small tool) "Reset"
		"EJECT" button(s) to eject the battery pack

13	External antenna	<ul> <li>x1 SMA antenna for cellular, on the top of the device.</li> <li>Shall be capable of bending or folding at least 180 degrees.</li> <li>Shall be capable of spinning 360 degrees around mounted axis.</li> </ul>	
14	Internal antenna	For Receiver Diversity Antenna	
15	Power supply	12 AA non-rechargeable battery, compatible with the previous product	
		Lithium rechargeable battery packs, compatible with the previous product	
		12V Solar Panel, compatible with existing products	
16	Working	-25C to +60C, 5%-95%	
	temperature and		
	Humidity		
17	IP Rating	IP66	

# 3 Certification

Item	Name	Requirement
1	FCC	Supported
2	PTCRB	Supported
3	RoHS, WEEE	Supported
4	Prop 65	Supported

FCC Regulations:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/ TV technician for help.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

### FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas

used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

#### ISED Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

In order to avoid the possibility of exceeding the IC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la IC CNR102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (8 pouces) pendant le fonctionnement normal.