

# Specification

## General - VR

### Dimension & weight (headset's in the process of optimization)

Width	200 mm
Height	100 mm
Depth	90 mm
Weight	350-400 g

### Supported smartphones

Max. size in mm (H x W x D)	160 x 83 x 11 mm
Min. size in mm (H x W x D)	135 x 67 x 6 mm
Min. resolution	FULL HD
Min. screen size	5"

## Optics

Virtual Reality FOV	105°
3D Home Theater FOV	55°
Lenses size	48 mm
IPD coverage	55-72 mm
Sharpness regulation	Covers nearsighted and farsighted eyes (in the range from -3 diopter to +3 diopter) 10 mm of regulation in total
Lenses-to-eyes distance regulation	15 mm of regulation in total
Lens type	Plastic

## Cmoar sensors to smartphone connection

Smartphones with USB OTG (USB HOST)	Micro USB dongle - radio connection with latency <1 ms
Smartphones without USB OTG	Bluetooth 4.0 LE - with latency <8 ms

## In-built electronics

Headtracking	6 DOF IMU output 1000 Hz (accelerometer, gyrometer, magnetometer)
Radio communication	2.4 GHz
Bluetooth 4.0 LE	2.4 GHz
Proximity sensor	
Battery capacity	1000 mAh
Average battery life	15 h
Charging time	2 h
Rechargeable via microUSB cable	

## Motion-to-Photon Latency

Bluetooth connection	<30 ms
Cmoar Radio connection	<20 ms

## Physical User Interface

Analogue  
Back button  
OK button  
Menu button  
Camera button

## Ergonomics & Design

Head mounting	Elastic, adjustable to head
Head mounting regulation	By Velcro
Illumination	Polychromatic, depending on the action taken by the headset
Isolation of light	Yes
Age of use	13-up
Color	Black & red

## Accessories

### Full HD Add-on screen

Screen size	5,98"
Resolution	1920x1080 px
Display type	TFT LCD
Refresh rate	60 Hz
Connection with sensors	Yes
Weight	40 g

### 2K Add-on screen

Screen size	5,98"
Resolution	2560x1440 px
Display type	TFT LCD
Refresh rate	60 Hz
Connection with sensors	Yes
Weight	40 g

### 3D Home Theater

FOV	55°
Width	200 mm
Height	100 mm
Depth	130 mm
Color	Black & grey

### Cmoar Motion Controller

In-built sensors	6 DOF IMU output 1000 Hz
Accumulator capacity	3000 mAh
Average battery life	45 h
Connection	Micro USB cable
Supported devices	iOS, Android, Windows, Cmoar VR
Communication	Bluetooth 4.0 LE / Cmoar Radio 2.4 GHz
Weight	100 g

### Power Bank

Battery capacity	13000 mAh
Charging time	~15 h

### **Cmoar Stand**

Headset charging function	Yes
Output	5 V
Amperage	500 mA

### **Additional accessories in the box**

USB cable for charging  
Manual  
Warranty

#### **Warranty**

Time      Two years