



World's first 5G Industrial Explosion-Proof MR Product

Rokid's headband is the world's most advanced 5G industrial-use AR product and is compatible with any standard safety helmet. It adopts the industry-leading waveguide optics technology for optimal see-through display and can be fully voice-operated. The product has many protective features such as dustproof, waterproof, and explosion-proof. The 5G module could be utilized for operation training, remote assistance, factory inspection, complex manufacturing equipment maintenance, etc. This AR headband is specially designed for frontline workers in the oil & gas, construction, manufacturing, and other high-risk industries.

Explosion-proof grade: Ex ib IIC T4 Gb Ex ibD 21 T135°. Applicable to petrochemical intrinsic safety zone 1 and zone 2

Mass production time: 2021



Industry-leading Diffraction Binocular Waveguide Display

Diffraction optical near-eye display technology
The best solution globally recognized

Hands-free

Fully voice-operated

The national leading AR Yoda OS system, encapsulate voice AI, visual AI, human-computer interaction and other core applications

The World's First 5G Smart Wearable Device

5G strengthens the data exchange between the AR glasses, the cloud, and many other IoT terminals, empowering frontline to increase productivity

Waterproof, Dustproof, Shockproof and Human-Centered Design

Intrinsic safety Zone 1 explosion-proof
IP66 dustproof and waterproof
Antistatic and anti-corrosion

Adaptable for Various Industries

The headband can attach many other accessories and peripheral devices, such as an industrial endoscope or infrared sensor modules, to expand its functionality

Chip and Platform	
Operating System	Yoda OS - XR (Self-developed and AR operating system, deep customization based on Android)
Chip Platform	Amlogic A311D
Supported Language	Chinese, English
Memory Storage	128G storage/4G memory
Software Package	The world's leading voice recognition algorithm, image recognition algorithm, human-computer interaction and other core underlying system applications

Internet Connection	
Communication	5G- The only AR glasses equipped with 5G modules worldwide
WIFI	WIFI 6 Provides ultra-high rate information transmission, the only AR glasses with WIFI 6
Bluetooth	BT 5.0

Sensor	
Positioning	GPS, Big Dipper, Glonass, Galileo
Sensor	Enhanced 9-axis IMU, light sensor, distance sensor

Battery	
Battery Capacity	10000 mAh
Battery Life	8 hours for normal use

Physical characteristics	
Weight	600 grams, uniform weight, comfortable to wear
Protection Level	IP66. Designed is based on the US military MIL-STD 810G standard; Can be used under extreme weather, high altitude and other extreme scenarios
Explosion-proof Grade	Ex ib IIC T4 Gb; Ex ib D 21 T135°C, can be used in explosive gas environment, suitable for petrochemical intrinsically safe zone 1
Physical Button	Encoding knob, power button, return button, SOS button, multiple interactive modes and one-button alarm
Interface	DC charging port, Type-C port, 3.5 headphone jack
Wearing Method	Compatible with standard helmet, plus upturn function. It's extremely flexible to use

Audio	
Microphone	Three digital microphones with active noise reduction, supporting 90% recognition rate in 85DB scenarios with the world leading technology
Speaker	Internal 90 dB speaker
Audio Port	3.5 audio headsets, Bluetooth audio headsets, Bluetooth throat microphones; Supports multiple audio peripheral connections

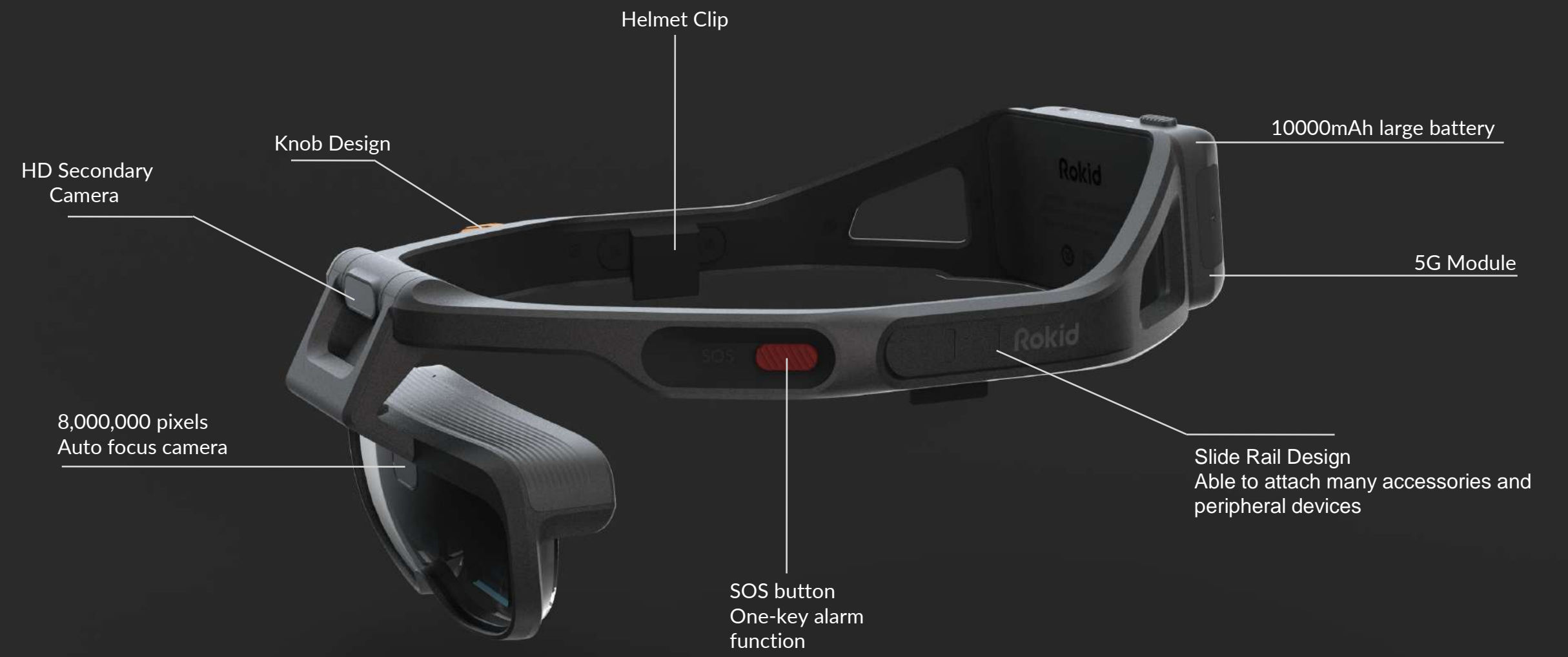
Optics	
Optical Solution	The world's leading binocular diffractive optical waveguide, large FOV, compatible with your own glasses
Brightness/Contrast	Adjustable from 300 to 1600 nits; Contrast ratio 400:1; Clearly visible outdoors
FOV	40-degree large FOV which is equivalent of watching a 120-inch large TV from 4 meters away
Resolution / Refresh rate	1280*720P, 60HZ

Multimedia	
Main Camera	12 million pixels, 105° FOV, supports auto focus, resolution ratio is 3840*2160
Secondary Camera	8 million pixels, 80° FOV
Video	Support 1080P video, 30fps, hardware decoding supports H.264

Scalability	
Slide	The headband can attach many other accessories, such as side sliding rails, infrared modules, ultraviolet modules
Extension Port	Support Type-C interface, link peripherals

Shading Lens	
Shading Lens	The color-changing lens can be adjusted according to different light conditions. Waterproof, anti-greasy, anti-fog, anti-fingerprint, anti-acid, anti-sweat, anti-corrosion, high-strength impact resistance, adapt to high and low temperature environments, anti-ultraviolet, etc.

Accessories	
Adapter	12V 2A DC interface meets the needs of extreme-cold and high-altitude charging requirement
Flashlight	Self-powered explosion-proof flashlight, can be stuck on the slide
Goggles	High-grade protective goggles
Explosion-proof Headset	Explosion-proof earphones can be used under noise circumstances



HD Secondary Camera

Knob Design

8,000,000 pixels Auto focus camera

SOS button One-key alarm function

Slide Rail Design Able to attach many accessories and peripheral devices

5G Module

10000mAh large battery

Helmet Clip



Visualized skills training



Field operation guidance



Remote expert guidance



On-site intelligent inspection



Data Information System



Digitalized System