



VUZIX SHIELD™

Smart Safety Glasses

Vuzix Shield™ is a revolutionary leap for enterprise AR smart glasses. Lightweight, stylish, prescription ready safety glasses and powerful 8-core CPU combine to deliver a singular wearable experience.

Connect to the metaverse accessing IT sensors, instructions, or live remote guidance, leaving your hands free. Scan codes with an advanced reader or wirelessly stream video from the field all enabled through voice or touch. With the world's first miniature microLED stereo displays, Vuzix Shield connects smart workforces with AR systems for optimized performance, safety and operational efficiency.

TECHNICAL SPECIFICATIONS¹

OPTICS

- See through Waveguide optics
- Displays: microLED monochrome green
- High brightness, high output CPU
- 8 core CPU running Android 10

BATTERIES IN EACH TEMPLE

CONTROLS

- Voice control – supports multiple languages and accessible to 3rd party integrators via SDK
- Capacitive touchpad on side of glasses that will support left/right/up/down swipes and one- or two-finger taps. The touchpad will be usable with gloves on.²
- Dynamic head tracking

AUDIO

- Integrated stereo speakers
- Digital noise-cancelling microphones
- Speakers are used for music playback, notifications, instructions, and phone calls
- Bluetooth audio functionality

NUMEROUS COLORS IN DEVELOPMENT

CERTIFICATIONS

- ANSI Z87.1 safety certification³

CAMERA

- Stereo 13-megapixel cameras with auto-focus
- Up to 4K 30fps video
- Integrated privacy LED
- Advanced optical reader includes barcode scanner

CONNECTIVITY

- USB 3.1 Gen2 over USB-C
- Wi-Fi 802.11/b/g/n/ac 2.4/5GHz
- Bluetooth 5.0 BR/EDR/LE
- Companion application for Android and iOS devices to come
- Support notifications with Android and iOS devices including text messages, email and phone calls to come



¹Specifications are subject to change

³Certification pending

²Use depends on glove type

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WAVEGUIDE



The waveguide used in our binocular Vuzix Shield smart safety glasses provides monochrome green imagery to the user through a compact, ergonomic design. Waveguides are available for both right and left configurations to support monocular and binocular use, with either an infinity and a ½ Diopter Configuration. (Shown, as designed in the Vuzix Shield, illuminated by a µLed display.)

CUSTOMIZABLE WAVEGUIDE ELEMENTS:

- Input Angle
- Output Angle
- FOV
- Color Performance
- Focus
- Mechanical Configuration (Shape)

GENERAL

- Field of View (FOV): Optimized for 30° Diagonal
- Design Wavelengths: 525 nm
- Input Angle: 9.5° Horizontal, 0° Vertical
- Viewing Angle: Mirror of Input
- Aspect Ratio: 16:9
- FOV Equivalent to: 6.2" screen at 18 inches
- Input Tolerance: +/- 0.5 mm
- Focus: ½ DIOPTER OR ∞
- MTF/Resolution: >50% @ 17.5lp/degree

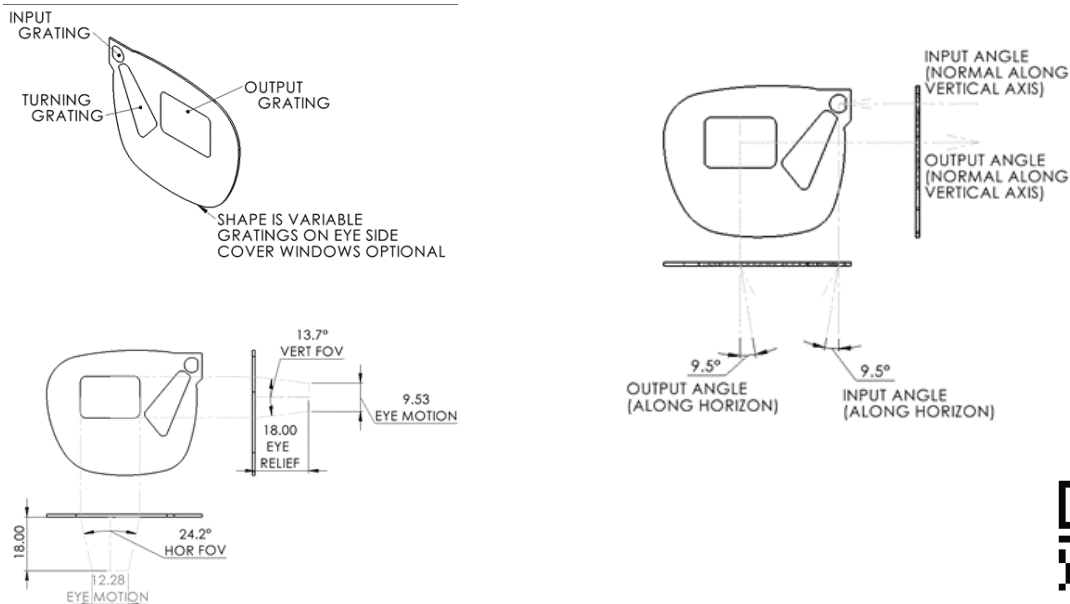
- Waveguide Type: SINGLE LAYER

- See Through Loss: 10%E
- ANSI Brightness: 4100 nits
- On/Off Contrast: >1000:1
- ANSI Contrast: 50:1

MECHANICAL

- Total Stack Depth: 1.0 mm
- Volume: 1.88 cubic cm
- Density: 2.72 g/cm²
- Weight: 5.11 grams

AT A GLANCE



vuzix.com/pages/oem



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NASDAQ: VUZI

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