First Enterprised-Focused Smart Glasses Using Vuzix Waveguide

The M4000 sports Vuzix optical waveguide to provide a completely non-occluded see-through heads-up display; and delivers increased processing power with the Qualcomm SXR1 platform with 8 cores and increased RAM and storage. The mechanical design has been ruggedized* and waterproofed for wide-ranging applications like harsh environments where safety and durability are needed most. The display has been upgraded to a waveguide-based lens and DLP projection with increased resolution to WVGA (854x480). The camera has also been improved, increasing the performance of scanning and telepresence capabilities.

The Snapdragon XR1 platform integrates Qualcomm Technologies’ heterogeneous computing architecture, including an ARM-based multicore Central Processing Unit (CPU), vector processor, Graphics Processing Unit (GPU) and Qualcomm® AI Engine. The Snapdragon XR1 allows for power efficient on-device processing of vision-based machine learning algorithms that can help with key Augmented Reality (AR) use cases like superior pose prediction, object classification, etc. The Snapdragon XR1 platform is also designed to deliver an immersive User Interface (UI) experience, with features such as native voice processing, motion tracking, head tracking and more.

*Waveguide optic is in-field replaceable
## TECHNICAL SPECIFICATIONS

### OPTICS
- See through Wave Guide optics
- Display resolution: WVGA color display 854x480
- Display type: DLP
- Aspect ratio: 16:9
- Field of View (diagonal): 28 degrees, equivalent to a 8.5" mobile device screen seen at 17"
- Brightness: > 1000 nits
- Contrast: > see through 500:1
- 24-bit color
- Supports left or right eye use

### UNIVERSAL M-Series RAIL FOR VARIOUS MOUNTING OPTIONS
- Vuzix M-Series Rail Eyeglass safety glasses frames (medium included)
- Viewer weighs less than 3.5 oz.
- Ball cap mounts
- Safety glasses frames, small and large available
- Hard hat mount
- Headband mount (included)
- Peltor headset mount

### SYSTEM
- 8 Core 2.52Ghz Qualcomm XR1
- 6GB LPDDR4 System RAM
- 64GB internal flash memory
- Android 9.0 OS
- OS and apps OTA upgradeable
- MDM available from multiple partners

### BATTERY
- 135 mAh internal battery supports hot swapping of external batteries
- 750 mAh head-worn USB-C external battery with 3-level LED indicator
- Can be powered by 3rd-party USB battery packs in place of head-worn battery
- 2 – 12 hours of operation based on external battery choice

### CONTROLS
- 3 control buttons
- Voice control – customizable and supports multiple languages
- 2 axis touchpad with multi-finger support

### AUDIO
- Integrated speaker (up to 97db output)
- Triple noise-cancelling microphones
- BT audio: HSP / A2DP

### CAMERA
- Up to 12.8-megapixel stills
- Up to 4k30fps video
- Improved auto-focus (PDAF)
- Improved optical image stabilization
- LED flash/scene illumination
- Barcode scanning

### CONNECTIVITY
- USB 3.1 Gen 2 on USB Type-C
- Wi-Fi 2.4/5Ghz 802.11 a/b/g/n/ac
- Bluetooth 5.0 BR/EDR/LE

### INTEGRATED HEAD TRACKER
- 3-degree of freedom head tracking
- 3 axis gyro
- 3 axis accelerometer
- 3 axis mag/integrated compass

### GPS
- GPS / GLONASS

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¹Specifications are subject to change  
²Waveguide is in-field replaceable  
³Targeted certifications

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