



# Free your hands in the most challenging of environments with **RealWear Navigator® Z1.**

## Superpower frontline teams in hazardous environments with AI enabled, hands free solutions.

Built to tackle operational challenges, mitigate safety risks, and reduce the emerging knowledge gap from retiring experts. Experience hands-free communication and streamlined two way data sharing, that will revolutionize knowledge sharing for your frontline teams in hazardous environments.



### Built for productivity



#### Stay connected wherever you are

Faster connectivity with Wi-Fi 6/6E and built to support 5G.



#### View everything you need at a glance

720p HD display plus 128GB to store content locally.



#### Share what you see in incredible detail

48MP camera with advanced image stabilization.

### Built for safety



#### Lightweight and comfortable for all-day use

The lightest, toughest ATEX Zone 1 and CSA C1/DA and mining-certified wearable computer.



#### Be heard in the loudest of environments

Noise cancellation enables voice operation in high ambient noise areas up to 100dBA.



#### Ruggedly built for demanding environments

Stress tested, drop tested, and able to withstand extreme temperatures.

### Built for the future



#### Run advanced tasks with AI-powered apps

AI Core processor will continue to enable new use cases.



#### Customize devices around the way you work

Modular design and accessories provide additional functionality.



#### See the invisible with the Thermal Camera Module

Optional unit to identify abnormal heat signatures.

# Specifications

## Core platform and functions

|                       |                                                                                                                                                                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating System      | Android 12 (AOSP) + WearHF® hands-free interface                                                                                                                                                                                                       |
| Chipset               | Qualcomm® QCS6490                                                                                                                                                                                                                                      |
| Memory                | 128 GB Internal Storage / 8 GB RAM                                                                                                                                                                                                                     |
| Included Applications | Document Navigator, Camera with Barcode Reader, Audio Recorder, Video Recorder, Webpage Viewer, Cloud Sync, Media Player, Calculator, Pedometer, Timer                                                                                                 |
| Languages Supported   | Chinese (Cantonese, Mandarin-Simplified and Traditional), Czech, Danish, Dutch, English (American, Australian, British, Indian), French, German, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Thai, Turkish |

## Connectivity and sensors

|                  |                                                                                            |
|------------------|--------------------------------------------------------------------------------------------|
| Bluetooth        | Bluetooth Low Energy 5.2                                                                   |
| Wi-Fi            | Wi-Fi 6                                                                                    |
| GPS and Location | GPS, GLONASS, NavIC, BeiDou, Galileo, QZSS, and SBAS                                       |
| IMU              | 9-DOF (3-axis accelerometer, magnetometer, and gyroscope), software enhanced stabilization |

## Battery

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| Capacity     | 2550 mAh Li-Ion; removable and rechargeable (Outside of Zone 1) |
| Battery Life | Full shift with typical use                                     |

## Physical characteristics

|                       |                                                                                                             |
|-----------------------|-------------------------------------------------------------------------------------------------------------|
| Weight                | 383g                                                                                                        |
| Ruggedization         | Intrinsically Safe (ATEX Zone 1 and CSA C1/D1), 2 meter drop tested, IP66, MIL-STD-810H                     |
| Dedicated keys        | Power key, application specific action key                                                                  |
| Ports                 | 3.5mm audio, 1 USB-C for data and charging                                                                  |
| Boom arm              | Adjusts six ways for all head sizes, left or right eye compatible, display flips out of way when not in use |
| Operating Temperature | -4° F to +131° F / -20° C to +55° C                                                                         |

## Display

|            |                                                                           |
|------------|---------------------------------------------------------------------------|
| Type       | 24° field-of-view, 24-bit color LCoS, 0.35 inch diagonal, outdoor visible |
| Resolution | HD (1280x720)                                                             |

## Audio

|             |                                                                        |
|-------------|------------------------------------------------------------------------|
| Microphones | 4 digital microphones with active noise cancellation                   |
| Speaker     | Accurate voice recognition even in 100 dBA of typical industrial noise |

## Multimedia

|        |                                                                                               |
|--------|-----------------------------------------------------------------------------------------------|
| Camera | 48 MP Sensor, PDAF with LED flashlight, modular (removable outside of Zone 1)                 |
| Video  | Up to 1080p @ 60fps, >6X zoom in HD, video stabilization. codecs: VP8, VP9, H.264, H.265 HEVC |

## Accessories

|          |                                                                                                                                                                                                                                                                                                                                     |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Included | Intrinsically Safe inline safety box charging cable, works with most RealWear Navigator accessories including mounting solutions, Intrinsically Safe hearing protection, replacement clips, and more. Single Battery Charger and Thermal Camera Charger are planned future accessories. Not all accessories are rated for IS zones. |
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