



# realwear HMT-1Z1®

World's first intrinsically safe, hands-free Android™ tablet class wearable computer for industrial workers.

|        |  |
|--------|--|
| ATEX   | II 2G Ex ib IIC T4 Gb<br>II 2D Ex ib IIIC T135°C Db IP6X                           |
| IECEX  | Ex ib IIC T4 Gb<br>Ex ib IIIC T135°C Db IP6X                                       |
| NEC500 | Class I, Division 1, Groups A,B,C,D T4 Class II & III, Division 1, Groups E,F,G T4 |

# Go Beyond.

## Fully Rugged Performance.

The RealWear® HMT-1Z1™ is an intrinsically safe ATEX Zone 1 and CSA C1/D1 certified fully rugged head-mounted device. Use it in wet, dusty, hot, dangerous environments. It optionally snaps into safety helmets and can be used with safety glasses or corrective eyewear.

The high-resolution micro display fits just below your line of sight and views like a 7" tablet. It's an industrial dashboard: there when you need it and out of your way when you don't.

The HMT-1Z1 works with powerful software applications from our solution partners in four core categories, each optimized for completely hands-free voice control. That means no scrolling, swiping, or tapping - just simple voice commands. Use it for remote mentor video calling, document navigation, digital workflow, mobile forms and industrial IoT data visualization.



C1/D1 and ATEX Zone 1  
Intrinsically Safe for Oil, Gas  
& Chemical Industries



### Intrinsically Safe

ATEX ZONE 1 AND CSA C1/D1



### 100% Hands Free

Voice based operating system with local speech recognition in loud areas.



### Unmatched Noise Cancellation

Four digital microphones and advanced algorithms.



### Powerful Audio

Integrated speaker and 3.5mm audio jack for use with hearing protection.



### PPE Compatible

Designed to work with standard hard helmets, bump caps and safety glasses.



### Full Shift Internal Battery

8-10 hours with typical use.



### Outdoor Display

Appears size of 7" tablet, viewable in bright sunlight.



### Water Resistant

IP66 – Protected against heavy seas or powerful jets of water.



### Dust Tight

IP66 – Complete protection against the ingress of micro particles.



### Drop Proof

Resistant to 2 meter drops onto concrete from any angle.



### Built Rugged

Fully operational from -20° C to +50° C MIL-STD-810G.

**Core Platform & Functions**

|                              |  |
|------------------------------|--|
| <b>Operating System</b>      | Android 8 (AOSP) + WearHF™ hands-free interface  |
| <b>Chipset</b>               | 2.0 GHz 8-core Qualcomm® Snapdragon™ 625 with Adreno 506 GPU - OpenGL ES 3.1 & OpenCL 2.0                        |
| <b>Memory</b>                | 16 GB Internal Storage / 2 GB RAM / MicroSD slot (max card supported 64 GB)                                      |
| <b>Included Applications</b> | Document Navigator, Camera with Barcode Reader, Video Recorder, Media Player                                     |
| <b>Languages Supported</b>   | English, Spanish, French, German, Italian, Portuguese, Russian, Mandarin Chinese, Japanese, Korean, Thai, Polish |

**Connectivity & Sensors**

|                         |  |
|-------------------------|--|
| <b>Bluetooth</b>        | BT 4.1 LE (Low Energy)   |
| <b>Wi-Fi</b>            | 802.11 a/b/g/n/ac – 2.4GHz and 5GHz  |
| <b>GPS and Location</b> | GPS, GLONASS, A-GPS  |
| <b>IMU</b>              | 9-DOF (3-axis accelerometer, magnetometer, and gyroscope), software enhanced stabilization |

**Battery**

|                     |   |
|---------------------|---|
| <b>Capacity</b>     | 3400 mAh Li-Ion, non-removable, rechargeable charging cable contains an inline “safety box” |
| <b>Battery Life</b> | Full shift (8-10 hrs) with typical use  |

**Physical Characteristics**

|                       |   |
|-----------------------|---|
| <b>Weight</b>         | 430 g   |
| <b>Ruggedization</b>  | Intrinsically safe, 2 meter drop, IP66, MIL-STD-810G  |
| <b>Dedicated Keys</b> | Power key, application specific action key  |
| <b>Ports</b>          | 3.5mm audio, 1 micro-USB for data and charging  |
| <b>Boom Arm</b>       | Adjusts six ways for all head sizes, left or right eye compatible, display flips out of way when not in use |

**Display**

|                   |   |
|-------------------|---|
| <b>Type</b>       | 20° field-of-view, 1 meter fixed focus, 24-bit color LCD, 0.33 inch diagonal, outdoor visible |
| <b>Resolution</b> | WVGA (854x480)  |

**Audio**

|                    |   |
|--------------------|---|
| <b>Microphones</b> | 4 digital microphones with active noise cancellation<br>Accurate voice recognition even in 95 dBA of typical industrial noise |
| <b>Speaker</b>     | Internal 91 dB loudspeaker  |

**Multimedia**

|               |  |
|---------------|--|
| <b>Camera</b> | 16 MP 4-image stabilized, PDAF with LED Flashlight                                       |
| <b>Video</b>  | Up to 1080p @30fps. Codecs: VP8, VP9 and hardware encoding support for H.264, H.265 HEVC |

**Accessories**

|                 |   |
|-----------------|---|
| <b>Included</b> | Overhead straps and rear pads (not attached), and intrinsically safe inline safety box  |
| <b>Optional</b> | Hard Hat Clips, Intrinsically Safe Ear Bud Hearing Protection Headphone rated at 33dB noise reduction rating (NRR), Replacement Overhead Straps and Rear Pads |