



# 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 II 2D Ex ib IIIC T135°C Db IP6X
IECEX	Ex ib IIC T4 Gb 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 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