



Go beyond

HMT-1Z1

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.

**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.

**Shock Resistant**

Resistant to 2 meter drops onto concrete from any angle.

**Built rugged**

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

HMT-1Z1

product specifications

Core platform & functions

| | |
|-----------------------|--|
| Operating System | Android 8.1 (AOSP) + WearHF™ hands-free interface |
| Chipset | 2.0 GHz 8-core Qualcomm® Snapdragon™ 625 with Adreno 506 GPU - OpenGL ES 3.1 & OpenGL 2.0 |
| Memory | 16 GB Internal Storage / 2 GB RAM / MicroSD slot (max card supported 64 GB) |
| Included Applications | Document Navigator, Camera with Barcode Reader, Video Recorder, Media Player |
| Languages Supported | English, Spanish, French, German, Italian, Portuguese, Russian, Mandarin Chinese, Japanese, Korean, Thai, Polish |

Connectivity & sensors

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

Battery

| | |
|--------------|---|
| Capacity | 3400 mAh/12.24 Wh Li-Ion, non-removable, rechargeable; charging cable contains an inline “safety box” |
| Battery Life | Full shift (8-10 hrs) with typical use |

Physical characteristics

| | |
|----------------|---|
| Weight | 430 g |
| Ruggedization | Intrinsically Safe, 2 meter drop, IP66, MIL-STD-810G |
| Dedicated keys | Power key, application specific action key |
| Ports | 3.5mm audio, 1 micro-USB 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 |

Display

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

Audio

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|-------------|---|
| Microphones | 4 digital microphones with active noise cancellation |
| Speaker | Accurate voice recognition even in 95 dBA of typical industrial noise |

Multimedia

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

Accessories

| | |
|----------|---|
| Included | Overhead strap and rear pad (not attached), and intrinsically safe inline safety box charging cable |
| Optional | Hard hat clips, Intrinsically Safe ear bud hearing protection headphone rated at 33dB noise reduction rating (NRR), replacement overhead straps, and rear pads. |

For more information contact:
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