



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

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

Audio

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.

