realwear® hmt-1Z1™

Powered by WearHF™

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

ATEX ⟨Ɛx⟩	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

Free your hands.™

Safer. Faster. Smarter.

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

Fully Rugged Performance

INTRINSICALLY SAFE
ATEX ZONE 1 AND CSA C1/D1

100% HANDS FREE
Voice based operating system, 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 and safety glasses

FULL SHIFT INTERNAL BATTERY
8-10 hours with typical use

OUTDOOR DISPLAY
Appears size of 7" tablet, viewable in bright sunlight

WATERPROOF
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

sales@realwear.com | realwear.com

Core Platform & Functions

Operating System	Android 6.0.1 (AOSP) + WearHF™ hands-free interface
Chipset	2.0 GHz 8-core Qualcomm® Snapdragon™ 625 with Adreno 506 GPU - OpenGL ES 3.1 & OpenCL 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

Connectivity & Sensors

Bluetooth	BT 4.1 LE (Low Energy)
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 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	Adjust 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 Accurate voice recognition even in 95 dBA of typical industrial noise
Speaker	Internal 91 dB loudspeaker

Multimedia

Camera	16 MP 4-image stabilized, 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 straps and rear pads (not attached), and intrinsically safe inline safety box
Optional	Hard Hat Clips, Intrinsically Safe Ear Bud Hearing Protection Headphone rated at 33dB noise reduction rating (NRR), replacement Overhead Straps and Rear Pads