



Industrial smart glasses for hazardous areas

With protection classifications in ATEX, IECEx and NEC500, the RealWear HMT-1Z1 is the only data goggles in the world that can be used safely in refineries, chemical plants or mills.

With the intuitive and completely hands-free RealWear HMT-1Z1 smart glasses, you always have both hands free for your tasks and access to information and communication at the same time. Ideal for remote maintenance, digital assistance and logistics. Via video remote support, your employees can receive support from experts during maintenance and immediately implement the instructions live, view plans and technical documents, query IoT data and document the work with photos and videos.

To ensure that using apps and entering data works reliably even in noisy environments, the RealWear HMT-1Z1 smart glasses have multiple digital directional microphones and active noise cancellation. The intuitive voice control supports 17 languages. The display is via a flexibly adjustable micro-display integrated in the headset, which is equivalent to a screen of about 7 inches. The 16 MP camera with autofocus and image stabiliser enables high-resolution photos and real-time video chat.

The robust RealWear HMT-1 smart glasses, which weigh only 430 grams, are certified with an IP66 protection class and can also be

mounted on a helmet for use in hazardous areas. Long outdoor operations and demanding maintenance applications are no problem with the powerful battery.

Android 10 offers a modern and secure technical environment for diverse software solutions. Whether standard applications or special apps for the use of the RealWear HMT-1 smart glasses in the field of maintenance, workflow support or documentation. Wi-Fi and Bluetooth offer many interface options for your IT systems.

Where can I buy the RealWear HMT-1Z1?

You can buy the RealWear HMT-1Z1 directly from Barcotec and our partners, including kits and accessories, we always have stock.

Specs

MicroDisplay 854x480 px (**appears like 7"**)

16 MP camera, autofocus & image stabiliser for high-resolution photo shooting and video calls

Multiple digital directional microphones & advanced active noise cancellation

Voice control suitable for use in **loud industrial noise** up to 95dB - no buttons, swiping or gestures

17 languages

Built-in **91dB speaker** and 3.5mm jack for headphones (with ear protection)

IP66 - dustproof & waterproof - 2 metre drop protection on concrete

Intrinsically safe: ATEX, IECEx und NEC500

Android 10 Qualcomm Snapdragon 626 platform, 3 GB RAM / 32 GB Flash

Wi-Fi + Bluetooth LE. Tether to smartphones, Mi-Fi or plug-in USB dongles for LTE access

8h battery life

GPS, gyroscopes and **digital compass** for positioning. Detects Bluetooth beacons

Weighs only **380 g**

Clips for mounting on **safety helmet**

Accessories

3-point head strap

RW-HMT-TRIS

Padded carry bag

Workband

Hard shell suitcase

Helmet clips

Hard shell suitcase for HMT-1 + helmet

Belt clip

RW-HMT-BECL

Platform & Features

Operating system: Android 8.1.0 (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 memory / 2 GB RAM / MicroSD slot (max. 256 GB)

Included applications: Document Navigator, camera with barcode reader, video recorder, media player

Supported languages: : English, German, Spanish, French, Italian, Portuguese, Polish, Russian, Mandarin & Chinese, Japanese, Korean, Polish, Indonesian, Thai

Connectivity & Sensors

Bluetooth: Bluetooth Low Energy 4.1

Wi-Fi: 802.11 a/b/g/n/ac - 2.4GHz and 5GHz

GPS and localization: GPS, GLONASS, A-GPS

IMU: 9-DOF (3-axis acceleration, magnetometer, gyroscope)

Battery

Capacity: 3400 mAh Li-Ion, exchangeable

Duration: 8 h for typical use

Physical Properties

Weight: 430 g

Keys: On/Off, application-specific action key

Ports: 3.5mm audio, 1 Micro-USB, 1 USB Type-C

Boom arm: freely adjustable, for right or left eye, when not in use simply fold away

Protection: IP66, MIL-STD-810G, 2 m drop test, dust-tight, waterjet-proof

Ex Protection:

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

Display

Type: 20° field of view, 1 meter fixed focus, 24-bit color LCD, 0.33 inch diagonal, also outdoor good readability

Resolution: WVGA (854×480)

Audio

Microphones: 4 digital microphones with active noise cancellation, precise voice control even at 95 dBA typical industrial noise

Loudspeaker: max. volume 91 dB

Multimedia

Camera: 16 MP 4-axis optical image stabilisation, PDAF with LED light

Video: Up to 1080p @30fps. Codecs: VP8, VP9 and hardware encoding support for