

# ARGO

Introducing ARGO<sup>™</sup> by DigiLens – the future of wearable computing.

ARGO smartglasses feature our best-in-class crystal waveguides with industry-leading minimal eye glow and a small footprint, resulting in a more user-friendly and socially acceptable product.

## **Key Features**

**Display** Efficiency and uniformity.

**Compute** Standalone full mobile compute.

**Camera** Photorealistic image quality.

**Audio** Multiple microphones designed to pick up the user's voice in a noisy environment.

**Connectivity** Ability to use the device in any environment.

**Design & Safety** Rugged industrial and enterprise design with socially acceptable form factor.

**DigiOS** Fully-integrated compatibility for the future of mobile computing.

Contact engage@digilens.com for additional information or to request a demo.

DIGILENS.COM/ARGO

## **Key Benefits**

The DigiLens difference: we're delivering smartglasses with scalability and quality at cost-effective price point.

### **Reduce costs**

Save money by overcoming the barriers of time, distance, and training to deliver expertise when and where it's needed most.

### Scale your workforce

Extend the availability and capacity of your workforce through remote training and realtime supervision.

### Improve productivity

Increase workforce productivity, reduce down-time, and minimize delays through remote collaboration.

#### **Remote expert**

Enable real-time access to remote experts for training, guidance, supervision, and quality assurance.

### Improve safety

Increase situation awareness through real-time connectivity to environmental and other sensor platforms and devices.

### Work smarter

Blend the digital and physical worlds with access to real-time data visualizations.

## Target Use Cases

ARGO improves communication and collaboration by creating a digitallyenabled workforce across a range of industries, empowering frontline workers from the field to the operating room.

- O Audio/Visual Installation
- ◎ Bio-Technology Manufacturing
- O Construction
- Consumer & CPG
- O Education
- O Entertainment
- O Finance
- Food & Beverage
- O Healthcare
- Industrial

- Law Enforcement & First Responders
- Land Surveying
- O Logistics
- O Luxury
- Manufacturing
- Military & Defense
- O Mining
- Retail
- O Telecommunications
- O Transportation

XR2 Platform	Wi-Fi 6E & BT
(SoC, neural engine, GPU)	WI-ITOL & BI

Qualcomm Snapdragon®

(MIMO - Bands 2.4GHz, 5GHz, 6GHz)

# ARGO

**Technical Specifications** 

**Crystal30 Waveguides** (Full color, 85% transparent, Replaceable)



(HD display, >3lm, LED-LCoS)

GNSS (GPS, GLONASS, etc.)



**48MP OIS/EIS Camera** (4x4 pixel binn

(6Wh int)

(Power & Data)

**Tracking Cameras** (6DoF, Depth, SLAM)

ning, enhanced low light)	Microphone & Speakers
ning, enhanced low light)	

(5-microphone beam forming, spatial audio)

Display	Compute	Camera	Audio
Efficiency and uniformity Waveguides » Greater than 85% see-through holographic waveguides » Greater than 2,500 nits to the user's eyes » 30° FOV, landscape design » Crystal30 Waveguide Gen3 Projector » LCoS and LED light engine with HD display	<ul> <li>Standalone full mobile compute</li> <li>» Qualcomm Snapdragon™ XR2 Gen 1 Platform, SoC based, 12 GB memory</li> <li>» 8-encrypted-cores (FIPS 140- 2 Level 1 &amp; Level 2 capable)</li> <li>» Multi-core neural/machine learning engine</li> <li>» Inside-out tracking (3 DoF, 6 DoF, and SLAM)</li> <li>» 128 GB UFS FLASH storage</li> </ul>	<ul> <li>Photorealistic image quality</li> <li>* 48MP with autofocus, lossless digital zoom, and low-light support</li> <li>* Support for high-res video streaming and media capture applications</li> <li>* Support for scanning barcodes and QR codes</li> <li>* Optical and electrical image stabilization</li> </ul>	Multiple microphones designed to pick up the user's voice in a noisy environment » Multi-microphone system (user, environment, and target) » Integrated stereo spatial speakers » Lossless Bluetooth® connectivity
Connectivity	Design & Safety	UX/UI	DigiOS
Ability to use the device in any environment » Wi-Fi 6E MIMO (multi-antenna system) with Bluetooth 5.2 » GNSS (GPS, GLONASS) » USB 3.1 Gen 2 on USB-C Il product specifications are ubject to change to improve eliability, function, or design. napdragon is a product of Dualcomm Technologies, Inc. nd/or its subsidiaries.	Rugged industrial and enterprise design with socially acceptable form factor » Industrial and military grade » Built for noisy environments » Water and dust resistant » Designed to MIL-STD-810G » ANSI Z87.1 eye safety compliant » Optional head strap	First AR device purpose-built for enterprise and lite- industrial workers; designed to be hands-free and body position independent with voice & gaze recognition » Always-On VoiceUI; multiple languages and sound beam forming » Integrated wheel and click with glove/weather compatibility » Spatial head-pose interaction (3 DoF and 6 DoF) » Hand tracking/Gesture UI » Multi-microphone (beamforming) and stereo spatial speakers	<ul> <li>Fully-integrated compatibility for the future of mobile computing</li> <li>AOSP Android 12, SDK, and APIs</li> <li>OpenXR, WebXR, and Snapdragon Spaces compatible</li> <li>DigiOS head-worn Android APIs</li> <li>DigiOS OTA updates (software builds and security patches)</li> </ul>



### What is ARGO?

FAQs

ARGO

ARGO is an enterprise-grade, pair of industrial smartglasses that leads the industry in form factor, transparency, and eye glow of any headworn XR device to date. Made by DigiLens, ARGO supports true Augmented Reality (AR) as a standalone system and leverages DigiLens' core waveguide technology. This all-in-one system is transforming the way people work in the enterprise and lite-industrial industries.

## What is Augmented Reality (AR) and how does it relate to other terms like Extended Reality (XR) and Virtual Reality (VR)?

Extended Reality (XR) is an umbrella term that describes two primary types of display technology: AR and VR. AR creates an overlay or layered view on top of the real world you would see through a normal pair of glasses. VR, on the other hand, creates a virtual world like the holodeck on Star Trek.

### What are the origins of the name ARGO?

In Greek mythology, Argus was the "all-seeing," son of Arestor, with a hundred eyes all over his body. Argus had the ability to survive without sleep, and for that reason became known for his vigilance and loyalty. As a reward for his service, the goddess Hera placed the hundred eyes of Argus on the tail of her sacred bird, the peacock. Argo was also the name given to the ship built by Argos for Jason to set sail across the Mediterranean to reach Colchis, a foreign land at the end of the earth to find the Golden Fleece, a symbol of authority and kingship with the power to heal and cure. According to legend, the Argo was the first ship to sail the seas and was favored by the gods, including Hera (symbolizing family) and Athena (symbolizing wisdom, knowledge, and battle). Those aboard the Argo were referred to as Argonauts, and this will be the name applied to the early adopters of our smartglasses technology. In the 14<sup>th</sup> century, Arg was used to describe a mythical "time traveler." Through ARGO, DigiLens is transporting us to the future of wearable computing, today.

# Is ARGO part of the Metaverse and an enabler of AI/ ML (artificial intelligence/machine learning)?

What's exciting – and sometimes confusing – about these new categories of display technologies is that the terms are constantly evolving and changing with each new device and idea. The metaverse sometimes refers to a primarily virtual world where digital avatars interact. But the metaverse can also refer to the broader category of XR as well.

ARGO may serve as a gateway to the metaverse, but we generally describe ARGO as being part of the "Digiverse" – an AR ecosystem DigiLens is building with our partners. ARGO is also an AI and ML delivery device and DigiLens has layered in partners to drive the next generation of AI and ML.

### Is ARGO a "see-through" or "passthrough" technology?

ARGO is a see-through technology and is truly paving the way for where augmented reality is heading. The key distinction is that see-through technology is truly transparent. Passthrough devices, by contrast, rely on projection; they project the external or "real" world on some form of head-worn technology. See-through technology is essential for a device like ARGO because of safety concerns in enterprise or industrial-lite settings. For instance, if the power fails on a passthrough device while performing surgery or operating a forklift you may not be able to see the work in front of you. With a see-through device, you only lose the overlay information and can still see the real world without any blackout.

#### ARGO<sup>™</sup> Microsoft Holol ens 2<sup>™</sup> Feature Set Form Factor Glasses Head Mounted (visor) **Industrial Design** Rugged Enterprise/Industrial Glasses Head/Visor Design **Compute Platform** Snapdragon® XR2 Gen 1 Platform Snapdragon 850 Industrial Certifications IP65, ANSI Z87.1, MIL-STD-810G ANSI Z87.1 **Operating System** DigiOS (Android 12 AOSP) Microsoft Windows Holographic 4GB LPDDR4 RAM 12GB LPDDR5 128GB UFS 64GB UFS Storage WiFi/BT WiFi 6E/BT5.X MIMO 802.11AC/BT5.X Cellular Peripheral Options Available None Tracking 6DoF (Camera, IMU) 6DoF (Camera, ToF, IMU) Cameras **3 Visible Cameras** 4 Visible Cameras Center Camera 48MP AF OIS / EIS w/ Pixel Binning **8MP Fixed Focus** Audio Spatial Audio w/ 5 mics Spatial Audio w/ 5 mics Binocular - Surface Relief WG **Displays Format** Binocular - Holographic WG **Light Engine** Folded LCoS/LED LBS FOV 30° 50° Excellent Uniformity & Color Accuracy Poor **Max Brightness** >3,500 nits 1,000 nits See-Through >85% 40% (Protective, WG, Protective, Front) **Compute Architecture** Stand Alone - Full Mobile Compute Stand Alone - Full Mobile Compute Weight ~200 grams\*\* 566 grams Enterprise/Developer **Target Market** Enterprise/Lite Industrial

### How does ARGO compare to other AR devices like HoloLens 2?

\*\*Configuration/layout-specific

All product specifications are subject to change to improve reliability, function, or design. Snapdragon is a product of Qualcomm Technologies, Inc. and/or its subsidiaries.

Excellent

Poor

We believe ARGO is a significant step up in this product space. ARGO is thin, bright, transparent, and socially acceptable. We're confident you won't feel weird or look like an extra in a sci-fi film while wearing ARGO.

This chart provides a helpful comparison between ARGO and HoloLens 2.

### What are the practical applications and uses for ARGO?

ARGO supports many use cases such as remote assistance, workflow, digital twin and data visualization, AI, ML, and next-generation training. Our goal is for ARGO to be utilized across 16 industries by 2027 including Construction, Consumer & Consumer Packaged Goods, Education, Entertainment, Finance, Food & Beverage, Healthcare, Industrial, Law Enforcement & First Responders, Logistics, Luxury, Manufacturing, Military & Defense, Retail, Telecommunications, Transportation & Automotive.

Our product page includes an extensive list of use cases at digilens.com/ARGO

### What is the market demand for ARGO?

The global head-mounted display (HMD) market is forecast to be worth \$29 billion by 2025, according to the Cisco VNI Report. Transportation and logistics will likely comprise 40% of that market followed by manufacturing at 14%, retail at 11%, architecture at 8%, energy at 8%, healthcare at 4%, government at 4%, public safety at 3% and other sectors at 8%. ARGO is best-positioned to meet market demand in each of those sectors.

### Who are DigiLens' key partners?

DigiLens partners include an impressive list of companies such as Continental, Niantic, Sony Innovation Fund, Panasonic, In-Q-Tel, Corning Incorporated, Samsung Electronics, Optimas Capital Management, Diamond Edge Ventures (the strategic investment arm of Mitsubishi Chemical Holdings Corporation), Alsop Louie Partners, 37 Interactive Entertainment, UDC Ventures (the corporate venture arm of Universal Display Corporation), and Dolby Family Ventures. This diverse ecosystem of companies brings important and unique strengths and areas of expertise that will enable ARGO to reach the scale today's market requires.

### What is DigiLens' valuation?

After its most recent Series D funding round that included more than \$50 million in new investments, DigiLens is now valued at over \$530 million.