# **Moverio BT-45CS**



## The Moverio BT-45CS Si-OLED binocular smart glasses with Intelligent Controller set a new standard of usability in industrial applications.

Based on Epson's revolutionary Si-OLED technology, the all-new BT-45CS smart glasses seamlessly blend digital content into a real-world environment. Featuring a headband-style headset for outstanding comfort, plus helmet clip attachment, they are compliant with international safety and durability standards, making them ideal for remote assistance, workflow guidance and training applications.

#### Revolutionise industrial workflows

Empower your workforce with enhanced knowledge sharing using the BT-45CS. With a hands-free display, a centred HD camera and integrated audio, two-way communication is stunningly clear and can be used to complete complex tasks with exceptional speed and efficiency.

#### Advanced optics

The Full HD display provides excellent colour reproduction and high transparency, ideal for step-by-step guidance and overlaying instructions.

#### Ergonomic and durable

The BT-45CS is compliant with MIL-STD-810H drop test<sup>1</sup> and IP52 standards, combining a robust construction with an ergonomic and comfortable design.

#### Moverio Intelligent Controller

Features an integrated touchscreen and provides the perfect platform for a range of applications. It includes flexible connectivity with Wi-Fi, Bluetooth, USB- $C^2$  and 2TB expandable storage, plus a built-in camera and flashlight.

#### DATASHEET / BROCHURE



## **KEY FEATURES**

- High visual and audio quality Centred HD 8MP front-facing camera with autofocus and built-in audio
- Hands-free, wearable display With flip-up design for when the display is not in use
- Rugged but comfortable A highly robust yet comfortable design with over-the-glasses support
- Simple and flexible connectivity Connects to compatible USB Type-C<sup>2</sup> devices with a single cable
- Proven durability and safety MIL-STD-810H drop test<sup>1</sup>, IP52 and ANSI Z87.1 compliant



## PRODUCT SPECIFICATIONS

OPTICAL		
Model Type	See-through binocular OTG (Over the Glasses)	
Optical technology	Si-OLED (Silicon - Organic Light-Emitting Diode)	
Panel size	0.45 inch wide panel (16:9)	
Pixel Number	2,073,600 pixels (1,920x 1,080) x RGB	
Field of View	Approx. 34 °	
Screen Size (Projected	120 inches at 5 m	
Distance)		
Colour Reproduction	24-bit colour (16.77 million colours)	
Refresh rate	60 Hz	
3D support	Side By side	
Contrast ratio	500,000 : 1	
HEADSET SENSORS		
Camera	8 million pixels	
Camera Autofocus	Yes	
Compass	Yes	
Gyroscope	Yes	
Accelerometer	Yes	
Ambient Light Sensor	Yes	
HEADSET CONNECTIVITY		
Connection type	USB Type-C	
Video Interface	Display Port Alternate Mode	
Display Port Version	1.2	
Audio Interface	3.5mm audio jack	
CONTROLLER OPERATING	SYSTEM	
OS Type	Android 10	
OS Type OS Update	Android 10 OTA (over-the-air)	
OS Update	OTA (over-the-air)	
	OTA (over-the-air) EMORY	
OS Update CONTROLLER CPU AND MI CPU	OTA (over-the-air) EMORY Snapdragon XR1 2.52GHz Octa Core	
OS Update CONTROLLER CPU AND MI CPU RAM	OTA (over-the-air) EMORY Snapdragon XR1 2.52GHz Octa Core 4 GB	
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OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory CONTROLLER DISPLAY Display type	OTA (over-the-air)  EMORY Snapdragon XR1 2.52GHz Octa Core 4 GB 64 GB Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)  IPS LCD	
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OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction	OTA (over-the-air)  EMORY Snapdragon XR1 2.52GHz Octa Core 4 GB 64 GB Micro SD (2GB max.), MicroSDHC (32GB max.), MicroSDXC (2TB max.)  IPS LCD 2.95 inch wide panel 409,920 ( 480 x 854 ) 800 : 1 24 bit-color (16.77 million colors)	
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OS Update CONTROLLER CPU AND MU CPU RAM Internal memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS	OTA (over-the-air)  EMORY Snapdragon XR1 2.52GHz Octa Core 4 GB 64 GB Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)  IPS LCD 2.95 inch wide panel 409,920 ( 480 x 854 ) 800 : 1 24 bit-color (16.77 million colors) 60 Hz	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera	OTA (over-the-air)  EMORY Snapdragon XR1 2.52GHz Octa Core 4 GB 64 GB Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)  IPS LCD 2.95 inch wide panel 409,920 ( 480 x 854 ) 800 : 1 24 bit-color (16.77 million colors) 60 Hz  13 million pixels	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Auto focus Microphone	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max.), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz	
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OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Auto focus Microphone Global Navigation Satellite System	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz         13 million pixels         Yes         GPS, GLONASS, Galileo, QZSS, BDS	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Camera Auto focus Microphone Global Navigation Satellite System Compass	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz         13 million pixels         Yes         GPS, GLONASS, Galileo, QZSS, BDS         Yes	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Auto focus Microphone Global Navigation Satellite System Compass Gyroscope	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz         13 million pixels         Yes         Yes	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Camera Auto focus Microphone Global Navigation Satellite System Compass Gyroscope Accelerometer	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max.), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz         13 million pixels         Yes         Yes	
OS Update CONTROLLER CPU AND MI CPU RAM Internal memory External Memory External Memory CONTROLLER DISPLAY Display type Panel size Pixel Number Contrast ratio Colour Reproduction Refresh Rate CONTROLLER SENSORS Camera Camera Auto focus Microphone Global Navigation Satellite System Compass Gyroscope	OTA (over-the-air)         EMORY         Snapdragon XR1 2.52GHz Octa Core         4 GB         64 GB         Micro SD (2GB max.), MicroSDHC (32GB max. ), MicroSDXC (2TB max.)         IPS LCD         2.95 inch wide panel         409,920 (480 x 854 )         800 : 1         24 bit-color (16.77 million colors)         60 Hz         13 million pixels         Yes         Yes	

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## WHAT'S IN THE BOX

- Headset
- Quick Start Guide
- Screw Set
- Shade
- Safety and support guide
- Carrying Case



#### PRODUCT SPECIFICATIONS

CONTROLLER CONNECT	IVITY	
Connector ports	microSD card slot, USB Type-C (DisplayPort Alt, USB 2.0, USB 3.0), USB Type-C (USB 2.0),	
	3.5mm audio jack (CTIA with microphone)	
Video Interface	Display Port Alternate Mode	
Display Port Version	1.2	
Wireless LAN	IEEE 802.11 a/b/g/n/ac, 2x2 Dual Band	
Bluetooth	5	
Built-in Speaker	Yes	
Built-in Microphone	Yes	
Built-in Earpiece	Yes	
USER INTERFACE		
Touchscreen	Yes	
Function key	HOME, BACK, Volume (+/-), Power, Recent button, Function button	
SUPPORTED FILE FORMA	ITS	
Video	MPEG4, H.264, MPEG2 (H.264+AAC)	
Audio	AAC, MP3, WAV	
SOUND OUTPUT		
Sensitivity level	80 dB/mW	
Impedance	16 ohm	
GENERAL		
Controller IP Rating	IPX2	
Operating Temperature	5 ° C - 35 ° C, 20 % - 80 % Humidity	
Battery Type	Li-Polymer 3,400 mAh	
Dimensions: Headset	290 mm x 200 mm x 57 mm (D x W x H) (without light shielding) (without headband)	
Dimensions: Controller	110 mm x 55 mm x 23 mm (D x W x H)	
Weight Headset	550 g	
Storage Temperature	-10 °C- 60 °C / 10 %- 90 % (no condensation)	
Power Supply Voltage	5 V, 2 A	
Controller		
Weight Controller	183 g	
OTHER		
Warranty	24 months Carry in	

## LOGISTICS INFORMATION

ѕки	V11H970140
EAN code	8715946710532
Country of Origin	China



For more information please contact: Home users: 0343 90 37766 Business users\*: 0871 42 37766 Republic of Ireland: 01 436 7742 Or visit us at https://www.epson.co.uk/contactus \* 10p per minute plus network extras.

Web: www.epson.co.uk www.epson.ie  MIL-STD-810H drop test applies to the BT-45C/BT-45CS headset and measures drops from 122cm in 26 directions. It measures compliance in the test environment and does not guarantee there will be no damage or failure.
 The Moverio BT-45C/BT-45CS supports video output via USB Type-C with devices that support DisplayPort Alternate Mode. Please check your device specifications, visit Epson's FAQ pages or contact an Epson representative for device compatibility details.



**Moverio BT-45CS** 

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