EPSON
EXCEED YOUR VISION

Epson Optical Engine

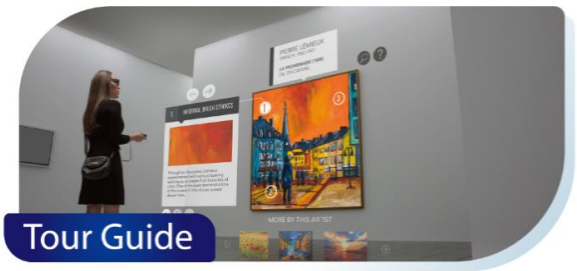
VM-40

Key Features

- Optical Engine for binocular see-through smart glasses.
- High image quality based on Epson Core Technology.
- Embedded display control circuit and motion sensor make easy development.
- Expansion port make various smart glasses to add function easily.
- USB Type-C smart glasses combine with option, VO-IF40.

Industry / Business

Entertainment



To Be Advanced Your AR Smart Glasses

VM-40 provides advanced display quality by Epson see-through optical technology. It supports not only optical components but also control circuit in order to develop commercialize smart glasses easily.

Epson Core Technology

Si-OLED Micro-display Technology: Contributes high image quality and miniaturization of optical module.

- High definition micro display
- Edgeless rendering for seamless AR
- Downsize circuit integration

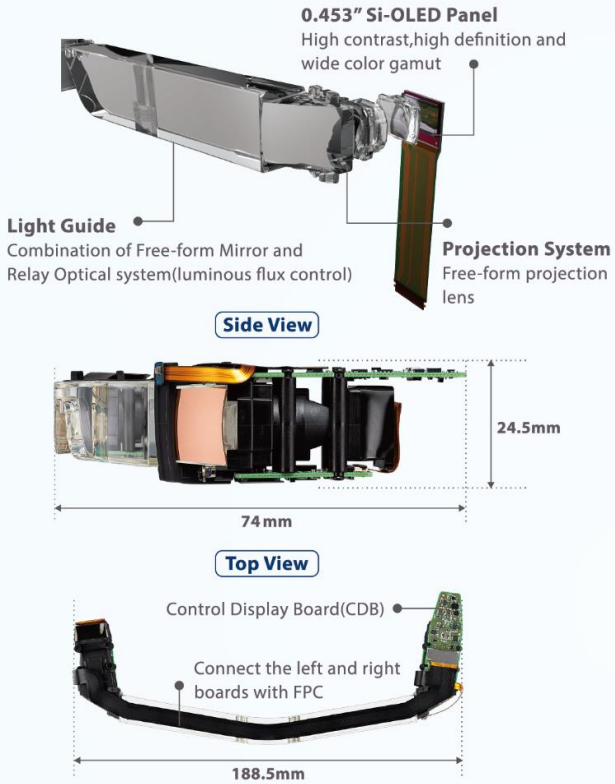
Optical Design Technology: Enables high quality digital image in very thin plastic glasses.

- Compact optical platform
- Accurate light distribution control

Assemble Technology: High level manufacturing technology

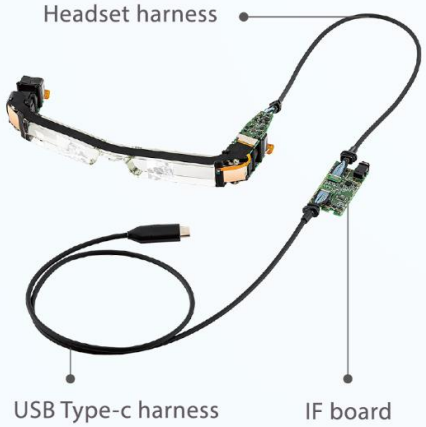
- Distortion-free

• VM-40 Optical Engine Design Technology



VM-40	Description
Device Type	Si-OLED
Display Size	0.453 inch wide
Pixel size	5.22um x 5.22um
Resolution	FHD (RGB 1920 x 1080)
Si-OLED Contrast	500,000 : 1
Refresh rate	60Hz
Field of View (Diag.)	34˚ (60 inch at 2.5m)
See through transparency	40%
Display distance	6.4 m
Color Reproduction	24 bit-color NTSC 90%
Video Interface	MIPI DSI
Data Interface	I2C x3
Input Connector	30pin Board to Board
Sensor	Gyro, Compass, Accelerometer, Ambient light
Supported 3D Format	Side by Side format
Dimensions	188.5 x 74.0 x 24.5 [mm]

• Options



Parts	Item	Spec
Headset harness	Type	Multicore shielding cable, Specific bush integrated
	Length	700 [mm]
	Diameter	3.4 [mm]
	Number of cores	30 lines
USB Type-C Harness	Type	Multicore shielding cable, Specific bush integrated
	Length	700 [mm]
	Diameter	3.4 [mm]
	Number of cores	30 lines
Interface board	Video interface	USB Type-C (DP1.2alt mode 1920x1080p/60Hz)
	Data interface	USB Type-C (USB3.1 Gen1)
	Audio Jack	4 pole mini jack (Earphone with microphone CTIA standard compatible)
	HDCP	Support
	Extension port	USB3.1 Gen1

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VSM Project

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Visual Sensing Module Developer Site：https://developer.cp.epson.com/vsm/

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