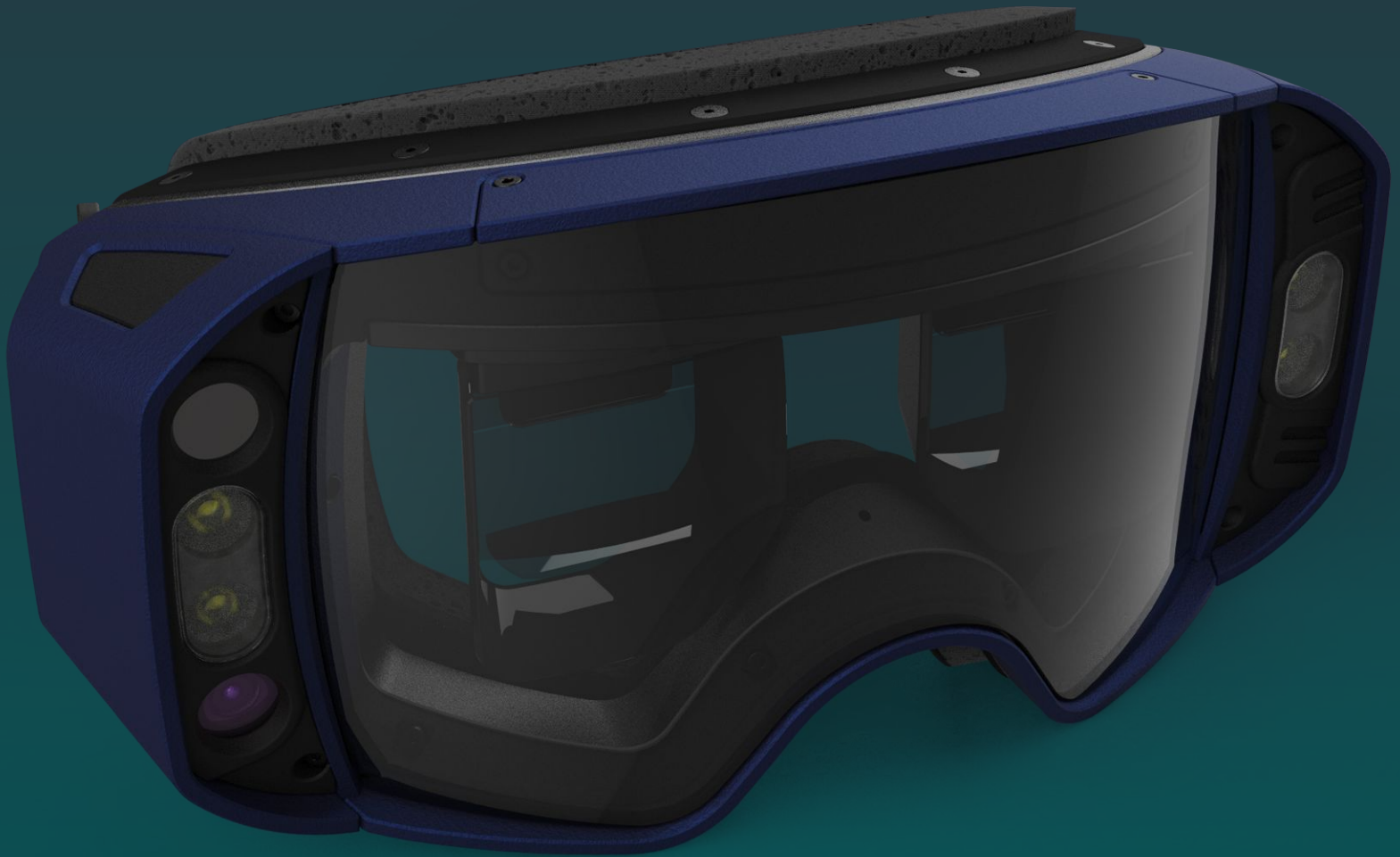


MARS BlueShift

AR Headset Dev-Kit

Built from the VX Modular Augmented Reality System



VX Inc.

Rugged - Modular - Bright

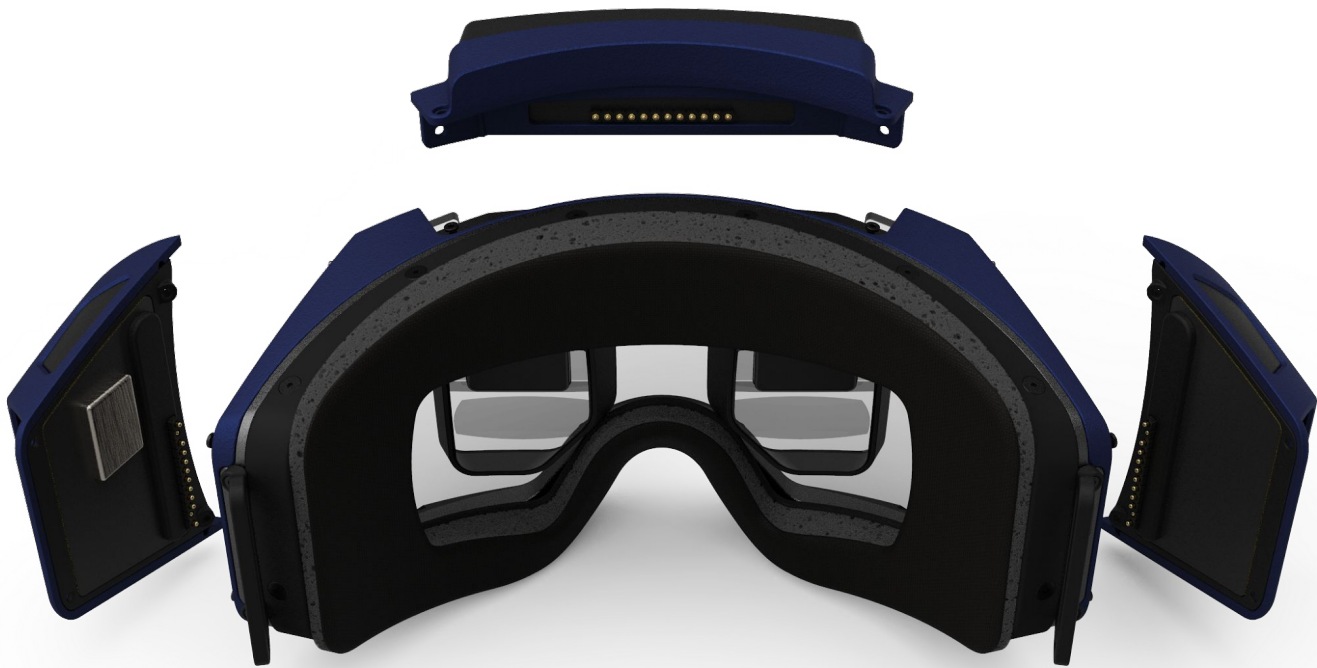
The Dev-Kit

The VX Blueshift is a finished development headset with everything needed to explore the VX Modular Augmented Reality System (MARS) features integrated into a rugged, outdoor-ready enclosure.

The BlueShift headset is ready for whitelabel customization and for high-performance AR application development. The full-featured USB Type-C interface supports Windows 10, Android, and Linux systems.

Ready for the Field

This headset development kit is meant for field testing in demanding environments. It is built rugged with an aluminum frame surrounded by PA12 Nylon. The BlueShift headset is designed for indoor and outdoors use for a wide range of environmental conditions.



Modular Design

Choose from a selection of modules. VX offers ready-to-go modules with cameras, depth sensors, inside-out tracking, and GPS INS capabilities. Additional modules can be quickly developed with the VX modular interface.

What Is Included?

- BlueShift Headset
- Protective Hard Case
- Locking USB Type-C Cable
- Clear Shield
- Elastic Strap

Accessories

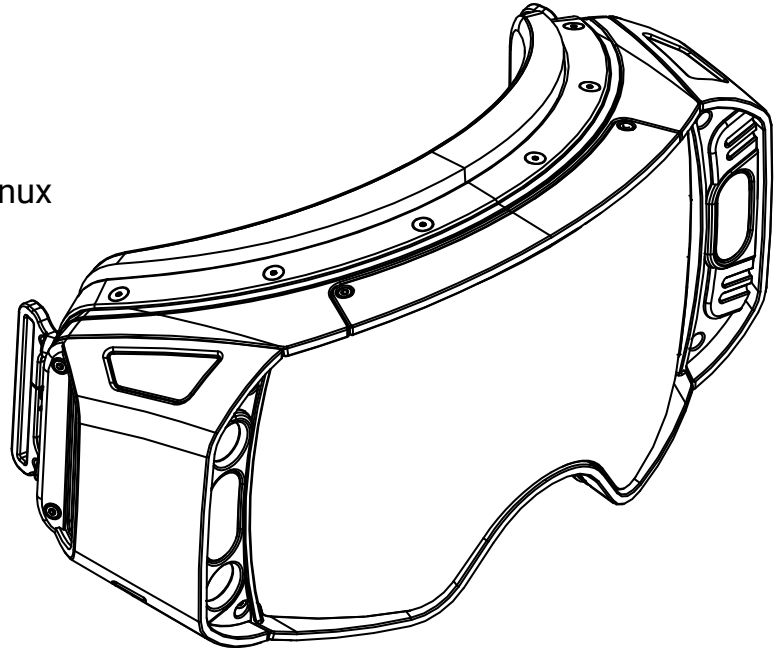
- **ODN-80005 Sensor Module**
 - 5MP Camera
 - Thermal Camera [160x120px]
 - Flashlights
- **ODN-50018 Depth Module**
 - Intel RealSense D430
- **ODN-50007 Tracking Module**
 - 6 DOF+GPS
 - Real-Time Positioning
 - Sub-Meter Accuracy



VX Inc.

VX BlueShift Features

- Modularized Design
- Usb 3.1 Type-C
- DP-ALT Mode
- Auto Enumerate Plug-n-Play
- Supports: Windows 10, Android, & Linux
- Onboard MCU for Data Processing
- Lightweight
- Expandable
- High Definition 1080p CNEDs
- 43° Fov Per Eye
- FHD Stereo Displays
- Low-light to daylight brightness
- Ruggedized
- Impact Resistant
- Water Resistant



Feature	Description	Typical	Units
Frame Material	Material of the enclosure frame	Aluminum	-
Mass	Base headset mass w/o strap, modules or shield	270	g
IPD	Interpupillary distance	63	mm
VLT@CNED	CNED visible light transmittance at 550nm	40	%
VLT@Shield	Untinted shield visible light transmittance at 550nm	88	%
FOV	Diagonal field of view	43°	°
Resolution	CNED display resolution	1920 x 1080	px
Luminous Intensity	High-Brightness Backlight (HBB-50002)	3600	mcd
Type-C	USBPD 2.0 with ALT Mode		
DP-ALT	Displayport version support	1.2	-
Device Bandwidth	Maximum data rate for displays and modules combined	10	Gbit/s
Module Bandwidth	Maximum data rate for all modules combined	5	Gbit/s
Display Bandwidth	Maximum data rate for Displayport 1.2	8	Gbit/s
Ruggedized	Designed for drop survival from 1m. (Customer to verify)		
Water Resistance	Designed to meet IP67. (Customer to verify)		
Impact Rating	Designed for high-mass impact. (Customer to verify)		



Augmented Reality
 Design
 Displays
 Integration