

Kiber 3 | ATEX PRIME SET

The third generation of all-in-one AR solutions

A-PS-BY-K3



Kiber 3 ATEX PRIME SET is a fully integrated AR solution for remote assistance certified for use in potentially explosive atmospheres: **empower your workforce in daily industrial operations with instant expertise and remote collaboration through AR technology.** Kiber 3 ATEX PRIME SET allows remote users to timely experience on-site situation and what is happening as if they were present and on-site workers to receive real-time support while staying focused on their job with an all-in-one “hands-free” solution.

ITEMS INCLUDED:

[Kiber 3 ATEX Kit](#) | Multi-feature wearable device

[Kiber 3 Web](#) | Powerful web-based platform

[Kiber 3 Field](#) | User-friendly mobile app for iOS and Android

Kiber 3 ATEX Kit | ATEX Head Unit

The multi-feature wearable hands-free device empowering field workforce

A-KT-K3 | KH3.0-HE-A



Kiber 3 Kit empowers field workforce with a wearable hardware for remote assistance based on AR technology: **a head-mounted device with a unique binocular visor, an HD video camera, a high performances set of headphones/microphone and a 4GB local storage to store documents locally.**

Designed to perform and satisfy the real needs of remote working operations.

A wearable solution allowing on-site workers to receive support while staying focused on their job with a "hands-free" solution.

- Bi-ocular high-resolution display (1280 x 960 pixel per-eye) for maximum visual comfort.
- Two display positions with magnetic clip to push the display completely out of the way when not needed.
- PPE for acoustic protection. Industrial, high quality headphones and microphone with noise suppression.
- 5Mpixel HD Camera with wide angle optic to clearly see what the technician is doing.
- High-resolution still image capture and transmission to annotate details of what is in front of the technician.
- On-board processor for optimised for low bandwidth (data compression) transmission.
- Hardware support and upgrades centrally managed.
- Can be mounted on different types of standard PPE hardhat and worn with most of safety glasses.
- ATEX Zone 1, CE, FCC compliant
- Replaceable Energy Management Units.

ITEMS INCLUDED:

- KH3.0-CoS-A | [K3 Core ATEX System](#): HMD - Binocular visor, HD camera, 4GB local storage (II 2G Ex ib IIC T3 Gb)
- KH3.0-HH-A | [PPE ATEX Hard Hat](#): Safety Helmet + Complimentary Helmet Chin
- KH3.0-HS-A | [Headset ATEX](#): Ear protection system + Professional noise cancelling headphones set with directional microphone (Ex ia IIC T4 Ga)
- KH3.0-CS-A | [Helmet Mounting ATEX Kit](#): Helmet Retention Kit
- KH3.0-BHe-A | [K3 ATEX Energy Management Unit](#) (II 2G Ex ib IIC T3 Gb) see "[K3 ATEX Energy Management Unit](#)" datasheet
- KH3.0-BC | [Charging system](#): see "[K3 Charging Unit](#)" datasheet

TECHNICAL SPECIFICATIONS

HEAD UNIT - DISPLAY SPECS

Visor type	BI-OCULAR (Max Readability & Comfort)
Screen resolution	Dual Display 1280 x 960 (Native)
Helmet clip	Magnetic (with resting position out of the way)



HEAD UNIT - CAMERA SPECS

Sensor	5M CMOS sensor
Angle of View (Diagonal) FoV	160°
Max Streaming Resolution (@30fps)	1920 x 1080 Pixel
Max photo Resolution	2592 x 1944 Pixel
DoF	From 10cm to infinity



COMMUNICATIONS SPECS

WiFi	802.11 2.4GHz a/b/g/n
Communication Protocols	TLS/SSL, HTTPS, WSS
Bluetooth	4.1 with BLE
Encryption and Security Algorithm	WEP, WPA2, WPA2 Enterprise

GENERAL INFORMATION

CPU	1GHz ARM 11
GPU Capabilities	OpenGL ES 2.0, H.264 codec (main profile)
Internal Storage	4GB
Power consumption	3.5 W full load
Rated Ambient Temperature Range	-20 °C + 40 °C
Storage Range	-20 °C + 40 °C
IP Rating	IP65
Dimensions (W x W x D) [mm]	155 x 360 x 280 (when stored)
Total Weight (w/o Energy Mgmt. Unit)	Approx. 1000g

Kiber 3 ATEX Kit | ATEX Handcam

The additional point of view with thermal imaging capacity

A-KT-K3



Kiber 3 ATEX Kit comprises a wireless handcam for additional points of view on field operator's working space. Kiber ATEX Handcam works side by side with the head unit and enables field operator to reach difficult spots and offer an additional point of view to the remote expert.

- Additional wireless camera with optical and thermal imaging useful to show details which are difficult or hazardous to get close to with head mounted camera.
- 5Mp HD Camera with narrow FOV and close-up focus to show surface details.
- Built-in flash light to see in dark spots.
- Built-in thermal sensor can be overlapped on top of standard image capture.
- High-resolution still image capture and transmission to annotate details.
- On-board processor for optimised for low bandwidth (data compression) transmission.
- Hardware support and upgrades centrally managed.
- Comes with a practical magnetic leash.
- Long lasting energy management unit for up to 8 hours of continuous usage.
- ATEX Zone 1, CE, FCC, EAC compliant.

ITEMS INCLUDED:KH3.0-CL | [Belt clip](#): Magnetic belt clip for handcamKH3.0-HC-A | [ATEX Handcam](#): Handheld camera with thermal imaging capacity - (II 2G Ex ib op is IIC T3 Gb)**TECHNICAL SPECIFICATIONS****COMMUNICATIONS SPECS**

WiFi	802.11 2.4GHz a/b/g/n
Communication Protocols	TLS/SSL, HTTPS, WSS
Encryption and Security Algorithm	WEP, WPA2, WPA2 Enterprise
Bluetooth	4.1 with BLE

HANDCAM - CAMERA SPECS

Max Streaming Resolution	1080p (can also stream 720p, VGA, QVGA)
Max Still Resolution	2592 x 1944
S/N ratio, Dynamic range	36 dB, 67dB @ 8x gain
Sensitivity	680 mv/lux-sec
Head unit camera focus range	3 cm up to 10 cm
Battery life	8 hours

HANDCAM - THERMAL SENSOR SPECS

Resolution	80 x 60 pixels
Frame Rate	8.6 fps
FOV – diagonal	51° (H) - 63.5° (D)
Thermal Sensitivity	< 0.050 °C
Thermal range	-10° C to 450° C
Radiometric accuracy	± 5° C or 5% (typical) from -10° C to 140° C (high gain mode) ± 10° C or 10% (Typical) from 140° C to 450° C (low gain mode)

GENERAL INFORMATION

Power Consumption	2.5W
Rated Ambient Temperature Range	-20° C +40° C
Storage Range	-20° C +40° C
IP Rating	IP65
Dimensions (H x W x D) [mm]	35 x 137 x 85
Total weight (w/o accessories)	Approx. 200g
Battery lifetime	6 to 8 hours

Kiber 3 ATEX Kit | K3 Energy Management Units

The longlife energy unit allowing to cover longer working shifts

A-KT-K3



Empowering workforce in their activities: **Kiber's energy management units guarantee a battery life up to 2-3 hours**, covering longer working periods in hazardous areas. Thanks to its lower power consumption, **Kiber 3 is the only system that guarantees a longer energy life** to operate through augmented reality: field worker is able to perform his activities hands-free and with reduced time pressure on his performance.

- Energy management unit(s) provided in the kit for the head unit.
- Single charger unit to charge up to two energy units plus the ATEX Handcam in a single go.
- You can use one energy unit while charging the other for continuous use.
- Charge time about 4 hours.
- ATEX Zone 1, CE, FCC, EAC compliant.

ITEMS INCLUDED:

KH3.0-BHe-A | [K3 ATEX Energy Management Unit](#): 2-3h duration, unit(s) supplied (II 2G Ex ib IIC T3 Gb)

KH3.0-BC | [Charging system](#): see "K3 Charging Unit" datasheet

TECHNICAL SPECIFICATIONS

GENERAL INFORMATION

Rated Ambient Temperature Range	-20° C +40° C
Storage Range	-20° C +40° C
IP Rating	IP65
Dimensions (H x W x D) [mm]	85 x 40 x 23
Total weight (per unit)	Approx. 150g
Energy Management Unit Capacity & Output	6400mAh - 4.2V
Energy Management Unit replaceability	Yes
Energy Management Unit lifetime - No streaming	2-3 hours
Typical charging time	4 hours

Kiber 3 ATEX Kit | ATEX Connectivity Kit

Connecting from anywhere across the world

A-KT-K3 | KH3.0-CK-A



Kiber helps every worker to be an expert by **making company's know-how accessible and available anytime and anywhere**: receive live support with low bandwidth consumption for satellite connections in remote locations if local wi-fi or hot spot connection is not available.

- Ready to go 4G router with a slot for local sims + a built-in "cloud sim"
- Local sims can be installed to have full control on network performances and selected operator
- Cloud-sim can be used as a quick alternative in more than 120 countries without the need of a local sim, useful for device travelling and frequent relocation
- Cloud-sim account can be managed on the internet to buy data packs on demand
- Fully charged router can provide connectivity for 15+ hours
- Optional ATEX cover for router can be provided for deployment in hazardous areas (ZONE 2)

TECHNICAL SPECIFICATIONS

CONNECTIVITY KIT

LTE FDD	Band 1/2/3/4/5/7/8/9/17/19/20
LTE TDD	Band 38/39/40/41
WCDMA	Band 12/4/5/6/8/9/19
CDMA/EVDO	BC0 BC1
GSM	50/900/1800/1900 MHz
Max Upload Speed	50 Mbps
Max Download Speed	150 Mbps
Wi-Fi	IEEE802.11b/g/n
Battery Capacity	5350 mAh
Input	DC 5 V
Size	126.5x65x19 mm
Weight	240 g (net)



ITEMS INCLUDED:

KH10CK-A | 4G router (no screen) inserted in a silicon rubber shell + 1 cloud SIMS with 1GB international data traffic + 1 SIM slot (II 3G Ex nC IIC T4 Gc X)

Kiber 3 Web

The powerful web-based platform for remote collaboration

S-WB-K3



becomes the shared collaboration space for accomplishing challenging operations. **Kiber 3 is cyber-safe and easy-to-use both for field workforce and for remote users** that can connect from their desktop with no additional software installation for remote guidance and assistance.

- **Cyber safe:** Uses standard HTTPS & WSS protocols for secure end-to-end encryption.
- Firewall and corporate networks-friendly.
- Optimised for low bandwidth (data compression): 5 levels of bandwidth selectable (highest 1Mbps).
- Multiple remote users can interact and contribute to the session: connect up to 3 remote users simultaneously.
- Simple to use, web-centered remote access portal: works with a standard browser (Chrome, Firefox, Opera, etc.) with no need to install any software.
- Complete session recording.
- Live, high-quality audio & video streaming.
- High-resolution image capture with annotations.
- Documents' visualisations through screen sharing.

ITEMS INCLUDED:

Access to Kiber 3 Web platform

One concurrent session for unlimited number of remote users licences x24 months

Kiber 3 Field

The easy-to-use mobile app to connect workforce

S-FD-K3



Kiber 3 Field is the AR mobile solution for remote assistance, it allows on-site workforce to quickly connect, using their smart devices (smartphones, smart tablets and smart glasses) with remote users for support and guidance in field operations of trouble shooting, maintenance, inspection and technical assistance.

Kiber 3 Field is AR ready, versatile and easy-to-use: it's a useful collaboration tool, with unique features to support remotely field workforce in completing challenging tasks.

- **Simple to use thanks to its user-friendly interface.**
- **Uses standard HTTPS & WSS protocols, firewall and corporate networks-friendly.**
- **Secure end-to-end encryption.**
- **Live, high-quality audio & video streaming.**
- **Multi-video conferencing.**
- **Shared collaboration space.**
- **Optimised for low bandwidth (data compression), works with 2G Edge too.**
- **Real-time mark-up on image and video.**
- **Easy interaction between users: multiple users can interact and contribute to the session in real time.**
- **Can jointly work with Kiber 3 Kit for device configuration and additional interaction capabilities**

ITEMS INCLUDED:

- App for iOS and Android
- One field user licence x24 months