



Elibcast PTT

Smart Video Push-to-Talk Service

v1.0



1. IP-PTT(PoC)

ElibCast | Smart Video Push-To-Talk Service



IP-PTT(Push-To-Talk) / PoC(Push-to-Talk Over Cellular)

“With Wi-Fi/LTE and Smart Device, Internet Protocol-based Push-To-Talk/Walkie Talkie service”

Just tap/press the ptt button to talk with your team members and others,
You can now communicate directly with anyone, without having to search for contacts or dial any numbers,

2. Needs of market for 2way-radio

ElibCast | Smart Video Push-To-Talk Service

Limitation of 2way-radio

- Only voice PTT
- PTT coverage area limitation
- Number of users limitation
- Channel of 2way-radio limitation
- Incompatible with the other frequency/service
- High cost of device/system operations



Technology changes

Well-used smartphone/LTE

Private LTE for business

Changing 2way-radio(Analogue → Digital)

Withdrawal of TRS frequency

Launch dedicated PTT terminal(device)

Introduction of Public Safety-LTE

Work changes

Wide working environment

Accurate situational awareness and rapid response

Real-time site/user management

Collaboration with related organizations

Needs and change

- Video beyond Voice PTT
- Real-time data sharing between users
- No limitation of PTT coverage and expanded service area
- Unlimited number of users and PTT group(channel)
- Create PTT group(channel) in Real-time
- Transmit SOS/Alert messages from administrator/users
- Data encryption for strong security
- Compatability with multiple devices (smartphone, Bluetooth, etc.)
- Voice PTT compatible with 2way-radio
- Integration with other system and services

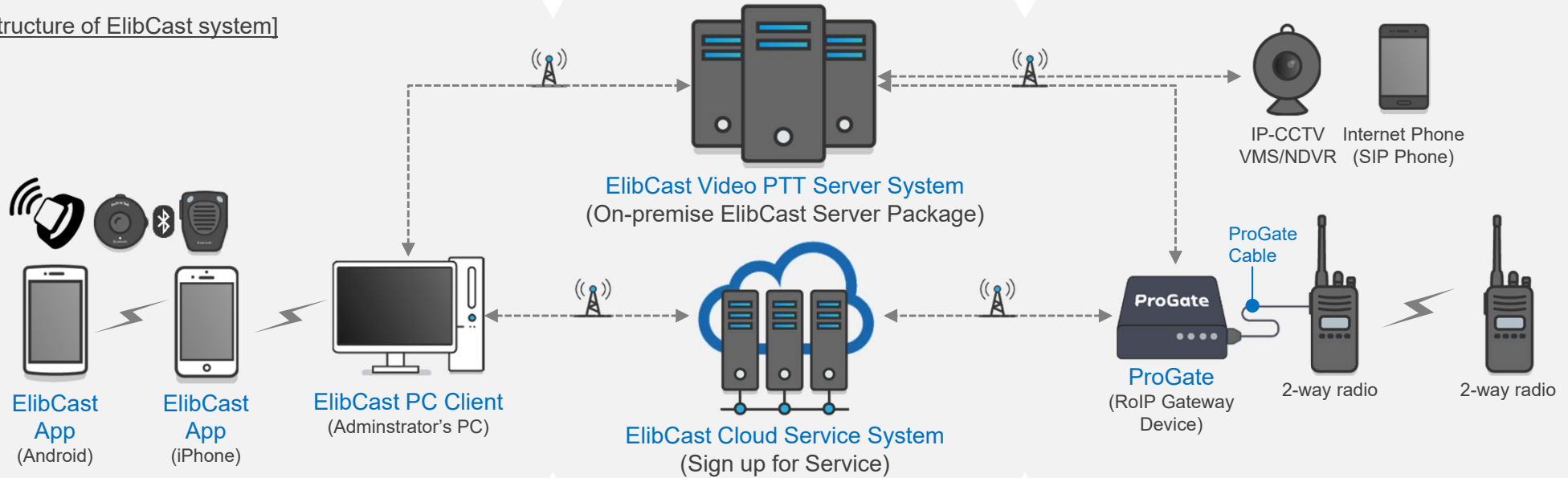


[ElibCast Features]

1. Advantage

ElibCast | Smart Video Push-To-Talk Service

[Structure of ElibCast system]



Video-based professional PTT App

- Video PTT, Video Sharing, Interrupting PTT, Voice PTT batch transmission
- Real-time data sharing(chatting, photo, location, SOS)

Various PTT App and support PTT dedicated devices

- iOS/Android, PC Client(Windows) for administrator
- Wearable App, support Bluetooth/wired accessories for PTT

Support customizing for PTT App

- changing logo image on top of App, support SDK for development of video PTT App

Easy implementation of video PTT service

- On-premise server software, Sign up for service
- Implementation of PTT service in at least one day

Real-time management of PTT, Strong security for PTT

- Real-time remote management of PTT channel and users
- SOS/Alert message between users/User's location monitoring and tracking
- support data encryption for PTT(SSL/TLS,AES/ARIA, E2EE)

Integration with other system and service

- Support ElibCast OpenAPI / Callback API / Plug-in

Voice PTT compatible with 2way-radios

- Support RoIP Gateway device(ProGate)
- Analogue/Digital 2way-radio, VHF/UHF/FRS/TRS

Compatible with other's system

- Voice PTT compatible with SIP Phone
- Sharing video of IP-CCTV camera

[ElibCast Features]

2. Main Functions



ElibCast | Smart Video Push-To-Talk Service

Wi-Fi/LTE-based Push-To-Talk Service	Professional Video Push-To-Talk	Optimized PTT features for smart devices	Support PC Client(Dispatcher) For administrator(or Center)
- Support full real-time push-to-talk - Support both VoIP mode of Full-Duplex and MP3 mode of Half-Duplex - For 1:1/1:N, support Video/Voice Push-To-Talk - Text chat and Transfer images between users - User's location sharing/tracking - Push-To-Talk history : play other's recorded PTT	Video Sharing PTT : Voice PTT and text chat during real-time video streaming Multi channel connection : connect up to 3 channels(1:N) and no limits channels(1:1) at the same time Interrupting Push-To-Talk - SOS message between users - Alert message from administrator	Smartphone App(iOS, Android) : Professional UI for video Push-To-Talk Embedded App(Android) : Simple UI and Fit to any screen of various devices - Support Wearable App(iWatch, android wear) - PTT widget and floating PTT button on screen - VOX PTT and chat with voice recognition - Using PTT button when screen is off - Set device's external button/keypad as PTT features - Support various Bluetooth/Wired accessories	- Windows7/IE11 or above Connect up to 64 PTT channels at the same time - Video Sharing PTT : Play up to 16 PTT channels' real-time videos from users - Support PC screen sharing and CCTV video sharing Voice PTT batch transmission by administrator after selected several channels - Interrupting PTT by administrators Support user's location monitoring and tracking
Compatible with other's system	Real-time management of PTT service with "Admin Web"	Strong security for PTT	Easy implementation of video PTT service
Voice PTT compatible with two-way radios - Analoque/Digital, VHF/UHF/FRS/TRS radios - Support RoIP gateway device(ProGate) - Voice PTT compatible with SIP Phone(SIP gateway integration) - Sharing video of IP-CCTV camera(RTSP integration)	- Manage user and PTT channel's information Real-time synchronization about PTT channel and user's information by administrator - Immediately apply changed PTT channel's information to all devices(users) - change PTT channel's information per user remotely - Forced reconnection after changing user's information - Support changing customer's logo image at the top of smartphone app	Support strong data encryption for PTT - OTP, SSL/TLS, AES/ARIA, E2EE - No duplicate access of user's account - Support IMEI authentication of smart devices - Use PTT app in mobile network(3G, LTE) only - Server-side PTT/Video recording and search/play - Support DNS-based server detection	According to the number of users, implementation of video PTT service - On-premise Server S/W(ElibCast Server Package) - Sign up for Service(ASP, ElibCast Cloud Service) - Support ElibCast Applications for free - You can download apps on stores and homepage - Support SDK for development of video PTT App - iOS, Android, Windows / for free Integration with customer's system and service - OpenAPI/Callback API/Plug-in

3. Provided by ElibCast's products

ElibCast | Smart Video Push-To-Talk Service

According to customer's needs, It's possible to build customer's own video PTT system.

Without building new system, just you can use video PTT service.

Products		ElibCast Server Package(Server Software for PTT)			ElibCast Cloud Service (ASP)
		Standard (Single Server)	Enterprise - Stand Alone (Single Server)	Enterprise – Clustered (Dual Server)	
Implementation		On-premise server software (User license per server type, per number of user)			Sign up for service (by monthly plan)
Operation of system		Customer			Elibrium Consulting Sdn Bhd – elibcast.com
Common Functions	Management of sevice	[For operator of customer] Support “Admin Web” Manage user and PTT channel’s information in real-time / changing customer’s logo image at the top of smartphone app, etc			
	Basic functions	[For user and administrator] : Video/Voice PTT, Text chat, Transfer Image, Monitoring other’s PTT history and location			
	Support PTT app(For free)	[For user] Smartphone App(iOS, Android), Embedded App(Android) / [For administrator] PC Client(Windows)			
	Compatible with 2way-radios	Support ProGate(RoIP Gateway device)			
Professional Functions	Video Sharing PTT	Only one user per one channel transmits video.	Multiple users per one channel can transmit video.		Only one user per one channel transmits video.
	User’s location monitoring	Support on “Admin Web”	Support on “PC Client”		Support on “Admin Web”
	User’s location Tracking	-	Support on “PC Client”		-
	PTT/Video Recording	-	Support server-side recording and player		-
	Compatible with other’s system	Voice PTT compatible with SIP Phone(SIP gateway integration) Sharing video of IP-CCTV camera(RTSP integration)			-
	Integration with other’s system	Support ElibCast’s OpenAPI, Callback API, Plug-in and IMEI authentication of smart devices			Support ElibCast’s OpenAPI, Callback API

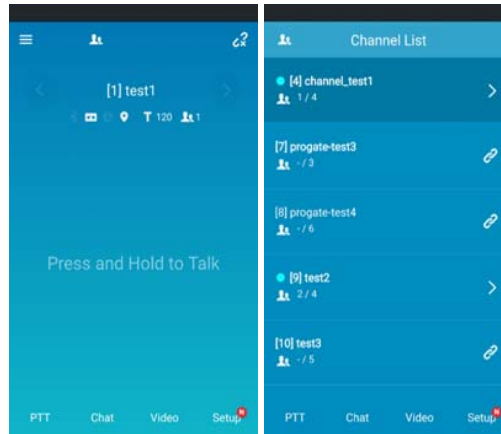
[ElibCast Features]

4. ElibCast's video PTT applications

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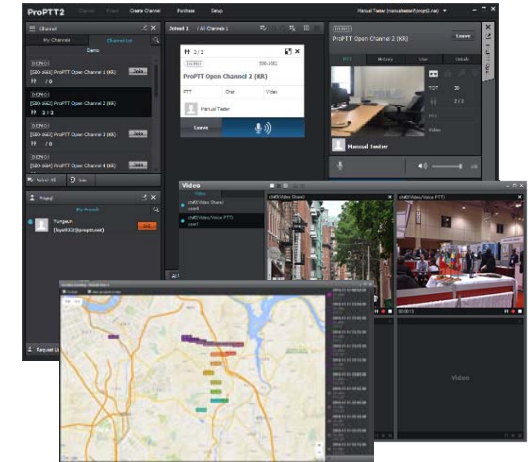
Android 4.0 / iOS 8.1 or above



Android 4.0 or above



iOS 9 or above/ Apple Watch 2(iWatch OS 3) only
Android OS 6.0.1/Android wear 1.4 or above



Windows 7 or above
IE 11 or above

Smartphone App	Embedded App	Wearable App	PC Client
For user, Professional PTT App	For User, Simple user interface	For user and smart watch	For administrator, Dispatcher program
- App download - Google PlayStore, Apple AppStore ✓ Support professional PTT UI and features ✓ Various features of setup about video PTT/video sharing	- App download - ElibCast site(www.ElibCast.com) ✓ Simple GUI/interface for PTT ✓ Fit to any screen of devices - small screen of PTT devices - wide screen of tablet(android)	- After download and install smartphone app or embedded app ✓ Your wearable device paired with your smartphone can be used as a PTT button via ElibCast Wearable App.	- App download - ElibCast site(www.ElibCast.com) ✓ Connect up to 64 PTT channels at the same time ✓ Play up to 16 PTT channel's real-time videos from users

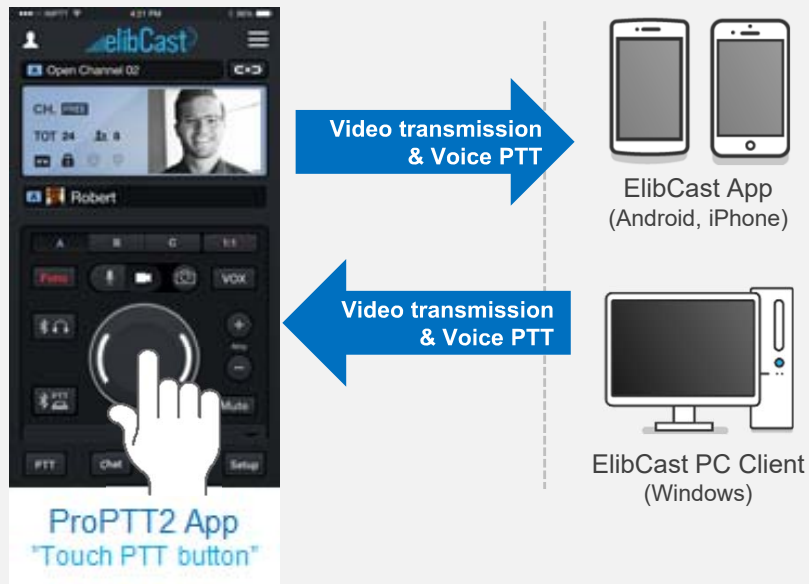
For on-premise server software or sign up for service, ElibCast's app can be downloaded for free

[ElibCast Features]

5. Video transmission(Video PTT, Video sharing PTT)

ElibCast | Smart Video Push-To-Talk Service

ElibCast/ Video PTT

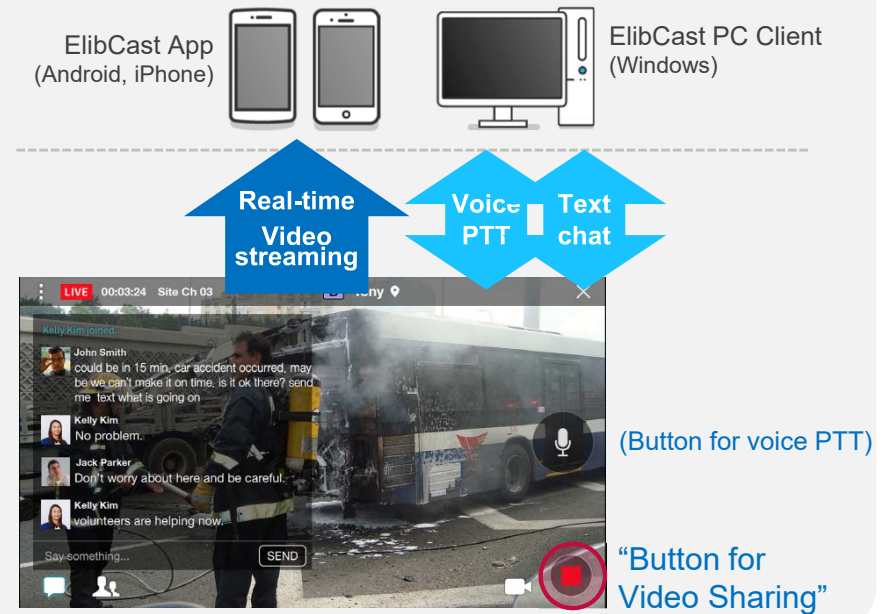


Video PTT(1:1, 1:N)

When PTT button of app is pressed, you can transmit your voice and video of camera to the others.

- Front/rear camera switching
- Select video quality(72/136/272kbps) on the setup of app

ElibCast/ Video Sharing PTT



Video Sharing PTT(1:1, 1:N)

If you press the button for video sharing, you can transmit the video of camera in real-time.

- During the video sharing, you can use voice PTT and text chat.
- Support not only built-in camera, but also external USB camera

6. Video Sharing PTT – Support external USB camera

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For convenient video sharing in a various areas,
ElibCast supports not only built-in camera in smart devices, but also external USB camera connections.



LifeCam Studio
Microsoft



SJ4000
SJCAM



Smarteye SPC300
SmartEye



EHEV2-USBA400
ABLE EYE



USB Inspection Camera
Armgroup



Look & Tell WC-U100
Look & Tell



LifeCam VX-500
Microsoft



Febon 168
SUNRIASE CO., LTD(FEBON)

USB2.0 FEBON 168 UVC driver free HDMI capture card

supported video:

- GoPro
- HDMI output camera
- PC, laptop screen
- other HDMI output video sharing

* wireless HDMI can be used

ex. <http://www.nyrius.com/wireless-hdmi>

[ElibCast Features]

7. Support various PTT dedicated devices

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ElibCast supports various screen resolutions of PTT devices and also supports to use PTT button when the app is in background or the device is screen-off. You can send/receive SOS messages each other by using SOS hard key.

Bluebird Inc.

Bluebird Inc.



RP350 Premium Rugged PTT Handheld

[Go to site](#)

1. Supports RP350 device's PTT button (Left, Right)
2. Supports RP350 device's resolution (HVGA, 480*320)
3. Supports using PTT button when screen is off



Bluebird EF500R

[Go to site](#)

1. Supports EF500R device's PTT button (Left, Right)
2. Supports EF500R device's resolution (1280*720)



Bluebird EF500

[Video](#) [Go to site](#)

1. Supports EF500 device's PTT button (Left, Right)
2. Supports EF500 device's resolution (1280*720)



Bluebird EF400

[Go to site](#)

1. Supports EF400 device's PTT button (Left, Right)
2. Supports EF400 device's resolution (WVGA, 800*480)

RugGear

RugGear



RugGear RG730

[Go to site](#)

1. Supports RG730 device's PTT button
2. Supports RG730 device's resolution (720*1280)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key



RugGear RG310B

[Go to site](#)

1. Supports RG310B device's PTT button
2. Supports RG310B device's resolution (QVGA, 240*320)
3. Supports using PTT button when screen is off



RugGear RG740

[Go to site](#)

1. Supports RG740 device's PTT button
2. Supports RG740 device's resolution (720*1280)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key

Sonim

Sonim Technologies Inc.



Sonim XP6

[Go to site](#)

1. Supports XP6 device's PTT button
2. Supports XP6 device's resolution (WVGA, 320*480)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key



Sonim XP7

[Video](#) [Go to site](#)

1. Supports XP7 device's PTT button
2. Supports XP7 device's resolution (WVGA, 480*800)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key

Boxchip

Boxchip Co.,Ltd



S700 4G/LTE DMR Android radio phone

[Video](#) [Go to site](#)

1. Supports S700 device's PTT button
2. Supports S700 device's resolution (400*480)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key
5. Supports channel change key



F25 4G LTE two-way radio phone

[Go to site](#)

1. Supports F25 device's PTT button
2. Supports F25 device's keypad input (shortcut)
3. Supports F25 device's resolution (QVGA, 240*320)
4. Supports using PTT button when screen is off
5. Supports SOS hard-key

K-Mobile

K-Mobile Technology Co.,LTD



F22 3G/LTE Android PTT Smartphone

[Video](#) [Review](#) [Go to site](#)

1. Supports F22 device's PTT button
2. Supports F22 device's keypad input (shortcut)
3. Supports F22 device's resolution (QVGA, 240*320)
4. Supports using PTT button when screen is off
5. Supports SOS hard-key



F100 4G PTT phone

[Go to site](#)

1. Supports F100 device's PTT button (Left, Right)
2. Supports F100 device's resolution (WVGA, 800*480)
3. Supports using PTT button when screen is off



F30 LTE Android Radio

[Video](#) [Go to site](#)

1. Supports F30 device's PTT button
2. Supports F30 device's resolution (QVGA, 240*320)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key



S88/S88-B LTE DMR Android Radio

[Go to site](#)

1. Supports S88/S88-B device's PTT button
2. Supports S88/S88-B device's resolution (TN, 480*854)
3. Supports using PTT button when screen is off
4. Supports SOS hard-key

8. Support various PTT accessories – Bluetooth devices

ElibCast | Smart Video Push-To-Talk Service

ElibCast supports using PTT button of Bluetooth device when the app is in background or the device is screen-off.

Seecode



BCP-910

Smart Safety Cap Radio
(Speaker Mic with PTT button)



SHM-612

Bluetooth Headset
with PTT Button



SCP-960

Bluetooth Speaker Mic
with PTT Button



SCP-860

Bluetooth Speaker Mic
with PTT Button



SHP-612

Bluetooth PTT Button

BlueParrot



**BlueParrott®
B450-Xt**

Bluetooth Speaker Mic
with PTT Button



**BlueParrott®
B350-Xt**

Bluetooth Speaker Mic
with PTT Button



**BlueParrott®
Reveal™ Pro**

Bluetooth Speaker Mic
with PTT Button

Savox



BTR-155

Bluetooth Speaker Mic
with PTT Button



BTH-101

Bluetooth Speaker Mic
with PTT Button

Analogue plus



Ahead

Bluetooth Speaker Mic
with PTT Button

bCODA



CODA Click

Bluetooth PTT Button



CODA Wheel

Bluetooth PTT Button



CODA S

Bluetooth Speaker Mic
with PTT Button

Klein electronics



BLU-PTT

Bluetooth PTT Button

Dellking



Wandfu-H3

Bluetooth Speaker Mic
with PTT Button



Wandfu-H2

Bluetooth Speaker Mic
with PTT Button

Rexon



Rexon BH-580

Bluetooth Speaker Mic
with PTT Button



Rexon BT-24HC2

Bluetooth Speaker Mic
with PTT Button

9. Support various PTT accessories – Wired PTT earphones

ElibCast | Smart Video Push-To-Talk Service

ElibCast supports using PTT button of dedicated ear set when the app is in the background or when the device screen is off.

Seecode




SCW7942(KKIRI)
2-Wire PTT Earpiece
* Dedicated earphone (Push-and-hold)

Klein electronics




Valor
Speaker/MicroPhone
* Dedicated earphone (Push-and-hold)




DRIFT
Single-Wire PTT Headset
* Dedicated earphone (Push-and-hold)




TRIUMPH
1-Wire PTT Earpiece
* Dedicated earphone (Push-and-hold)




VICTORY
2-Wire PTT Earpiece
* Dedicated earphone (Push-and-hold)

Milicom




Earhook & Earbud Smart 2-In-1
Call & PTT Headset
* Dedicated earphone (Push-and-hold)




Acoustic Tube Smart 2-In-1
Call & PTT Headset
* Dedicated earphone (Push-and-hold)




D-Loop Smart 2-In-1
Call & PTT Headset
* Dedicated earphone (Push-and-hold)




In-Ear Mic Smart 2-In-1
Call & PTT Headset
* Dedicated earphone (Push-and-hold)




In-Ear Mic PTT Only
PTT Only Headset
* Dedicated earphone (Push-and-hold)




In-Ear Mic Y PTT W / Remote
PTT Only Headset
* Dedicated earphone (Push-and-hold)

Thank you.

ElibCast | Smart Video Push-To-Talk



Voice/Video PTT



Real-time Video Sharing PTT



Talking with Two-way Radio