FREEDOMATLANTIC

UN-CLASSIFIED

**SPECIAL PROJECTS**
FREEDOM ATLANTIC

CASE FOLDER

## FILE/CASE REF. NO.

PRODUCT CATALOG
YR. 2024

AGENT (S) Freedom Atlantic

DATE 07-11-2024

SUPERVISOR (S) N. Dunham C.I. 005698L

SEE ALSO NOTES:

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# FREEDOMATLANTIC

FREEDOM ATLANTIC IS A SERVICE-DISABLED VETERAN-OWNED BUSINESS COMPRISED OF FORMER SPECIAL OPERATIONS PERSONNEL AND A PURPOSE-LED ENGINEERING TEAM ACCREDITED WITH DECADES OF EXPERIENCE IN THEIR RESPECTIVE FIELDS.

# WE ARE FREEDOM ATLANTIC

## OUR MISSION

At Freedom Atlantic, our mission is to deliver superior, innovative, and cost-effective Command, Control, Communications, Computers, Combat Systems, Intelligence, Surveillance, and Reconnaissance (C5ISR) technology solutions that empower the warfighter to maintain situational awareness and dominance at the tactical edge. Leveraging the unparalleled expertise of our former Army Special Operations personnel and highly experienced engineers, we provide critical insights, comprehensive training, and hands-on support to ensure the effective use of advanced tactical equipment in real-world operational environments. We are committed to fostering excellence, integrity, and innovation in all our endeavors, continuously striving to enhance the effectiveness and safety of our nation's defenders.

## OUR VISION

At Freedom Atlantic, we leverage decades of Special Operations expertise and world-class engineers to deliver reliable and robust communications solutions. Our products ensure the end user maintains situational awareness and dominance at the tactical edge. We are dedicated to fostering innovation, operational excellence, and a relentless focus on enhancing the effectiveness and safety of our nation's defenders.

# VALUE FOCUSED

## RESPECT & TEAMWORK

We treat each other with kindness, empathy, and consideration. We actively listen, value diverse perspectives, and collaborate to achieve shared goals. Together, we build a supportive and cohesive environment where everyone thrives as a team.

## INTEGRITY & ACCOUNTABILITY

We uphold unwavering integrity in all our actions. We take responsibility for our decisions, admit mistakes, and learn from them. Our commitment to accountability ensures transparency, trust, and ethical behavior throughout our organization.

## EXCELLENCE & INNOVATION

We encourage creative thinking, continuous improvement, and a willingness to explore new ideas. Our commitment to innovation drives us to develop unique solutions to complex challenges, take calculated risks, and devise new ways to serve our customers, team members, and mission.

## VETERAN EMPOWERMENT

As a Service-Disabled Veteran-Owned Small Business, we are dedicated to empowering veterans and leveraging their unique skills and experiences. We recognize the value that veterans bring to our organization and are committed to hiring veterans, their families, and supporting veteran initiatives while recognizing their sacrifices to our great nation.

# LEADERSHIP

NATHAN DONHAM

DAVID MARTSCHINSKE

BRAD LAMBES

These guys lead us....

## NATE DONHAM: CEO

Retired Special Operations Forces information technology leader with 20+ years of honorable military service. Offering creative and innovative thinking to solve complex communications problems drawing on unique 16+ years of SOF experience. Leading programs such as ATAK development, Autonomous vehicle, and Tactical networks.

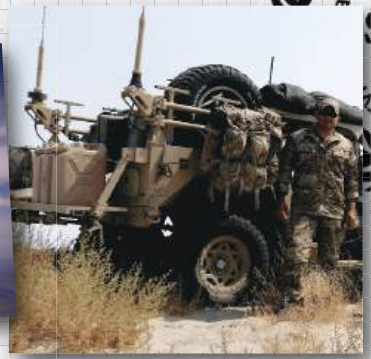
## DAVID MARTSCHINSKE: VP - PRODUCTS

Mr. Martschinske has 16+ years of product development experience in a wide range of industries including commercial outdoor, motion control systems, and communications equipment for USG/DOD. Mr. Martschinske has been instrumental in the design and development of several solutions that are currently fielded by US and coalition partners, military, and law enforcement entities.

## BRAD LAMBES: CHIEF OF STAFF

Retired Special Operations Leader with 20+ years of honorable military service. Skilled in strategic planning, information assurance, operations and program management. His expertise spans resource allocation, workflow optimization and supply chain management, honed through years of hands-on experience in government and commercial industries.

Our users, Our focus



Veteran Owned Small Business
SDVOSB
CVE

# VETERAN-OWNED, MISSION FOCUSED

As a Service-Disabled Veteran-Owned Small Business, we are dedicated to empowering veterans and leveraging their unique skills and experiences. We recognize the value that veterans bring to our organization and are committed to hiring veterans, their families, and supporting veteran initiatives while recognizing their sacrifices to our great nation.

# PRODUCT OFFERINGS

## 01

ANTENNAS

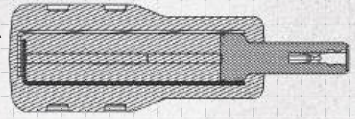
## 02

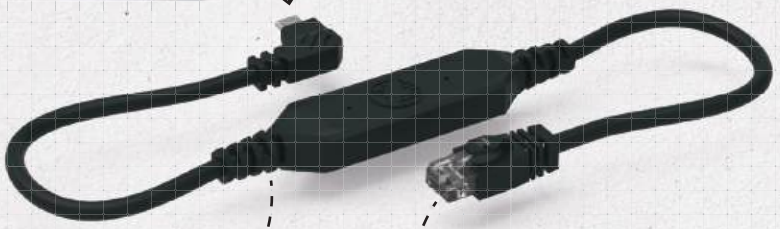
## RADIO COMMUNICATIONS

## 03

## PERIPHERAL MANAGEMENT

**Flex Overmold**
In tests, the connectors withstood 75,000 cycles in electrical continuity, whereas competitor designs failed after just 1,000-3,000 cycles.





**6X Longer Life**
Overmold design has been tested to survive electrical conductivity more than 6x longer than equivalent cables on the market.

**RJ45 Male**
Utilize the RJ45 male connection to connect to any ethernet device with a female RJ45 port.

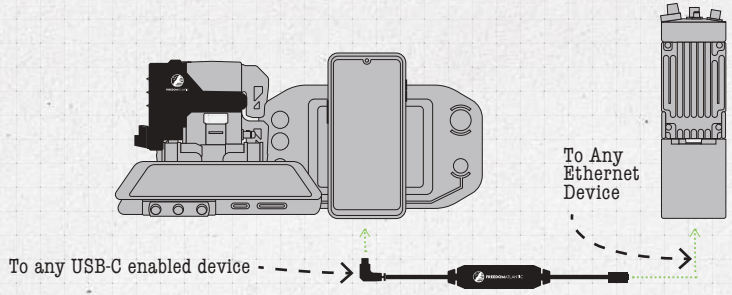
# USB-C TO ETHERNET CABLE

The Freedom Atlantic USB-C to Ethernet cable provides a rugged and secure connection from ethernet devices to the USB-C port on an android EUD.

Part Number
**S.PCR51.RJ45M.ETH.18**

Export Classification
**EAR99**

## CONFIGURATION OVERVIEW




## SPECIFICATIONS

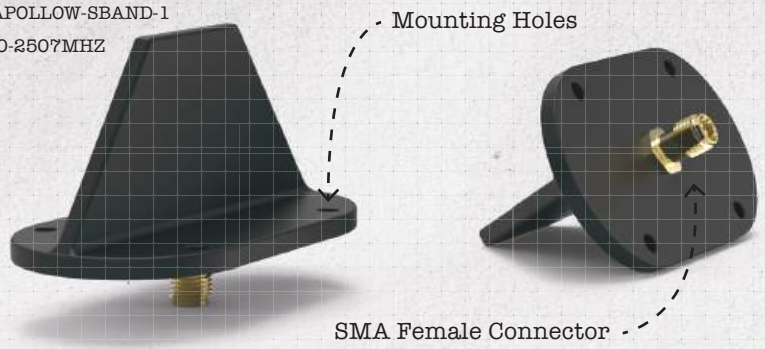
*Contact Freedom Atlantic for custom or cable length reccomendations to meet your mission needs.

## KEY FEATURES

- USB-C to Ethernet Protocol Translation
- Metal-reinforced protection
- Customizable ends for your unique application
- Utilize the RJ45 male connection to connect to any ethernet device with a female RJ45 port.
- Overmold design provides dependable ruggedness in any environment to accomplish the mission

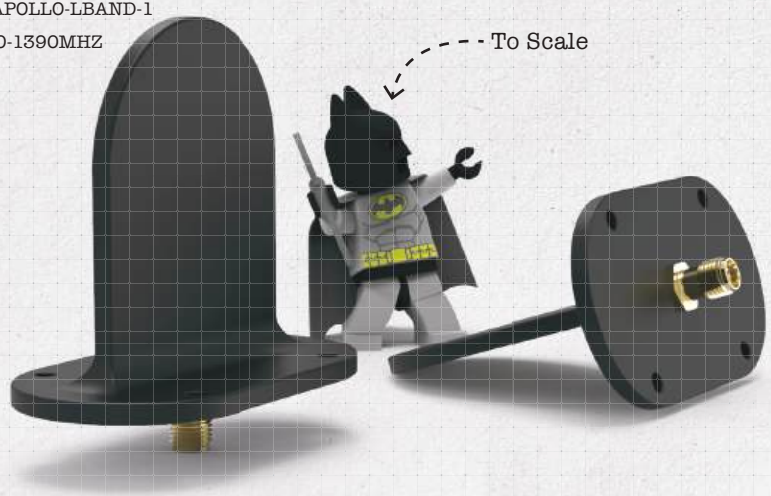
## S-BAND ANTENNA

- FA-APOLLOW-SBAND-1
- 2200-2507MHZ




## L-BAND ANTENNA

- FA-APOLLO-LBAND-1
- 1350-1390MHZ



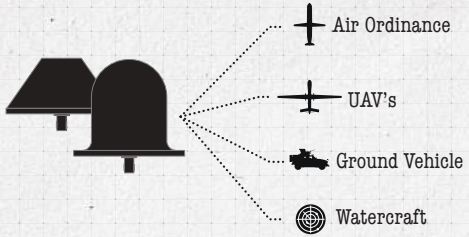

# APOLLO UAV FIN HIGH GAIN OMNI ANTENNA

Freedom Atlantic's Apollo UAV FIN Omni Antennas are designed for use on unmanned aerial vehicles in particular carbon fibre platforms where antenna power can be lost due to the carbon absorption properties. Other uses could be covert or discreet platforms where Flexible Fabric antennae may not be suitable. The antenna is constructed from Glass Reinforced Plastic (GRP) encapsulated in plastic which is extremely rugged and lightweight.

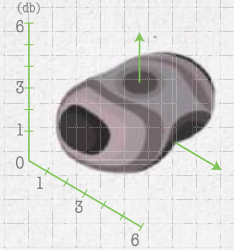
Part Number
**S-Band: FA-APOLLO-SBAND-1**
**L-Band: FA-APOLLO-LBAND-1**
**C-Band: FA-APOLLO-CBAND-1**

Export Classification
**EAR99**

## CONFIGURATION OVERVIEW




## TOTAL GAIN

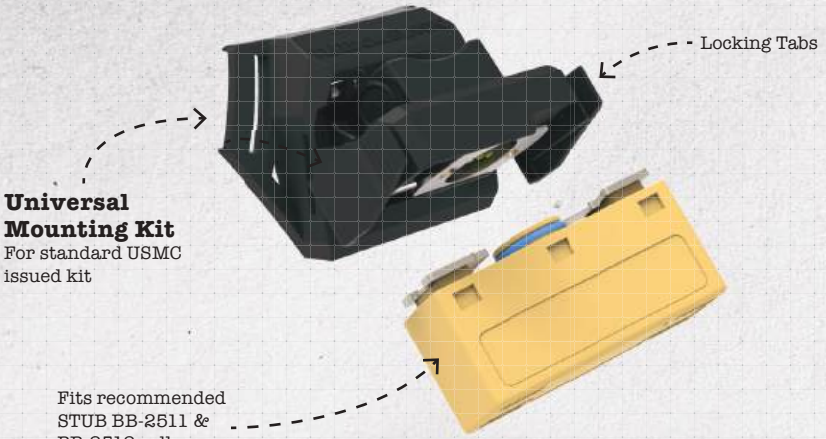


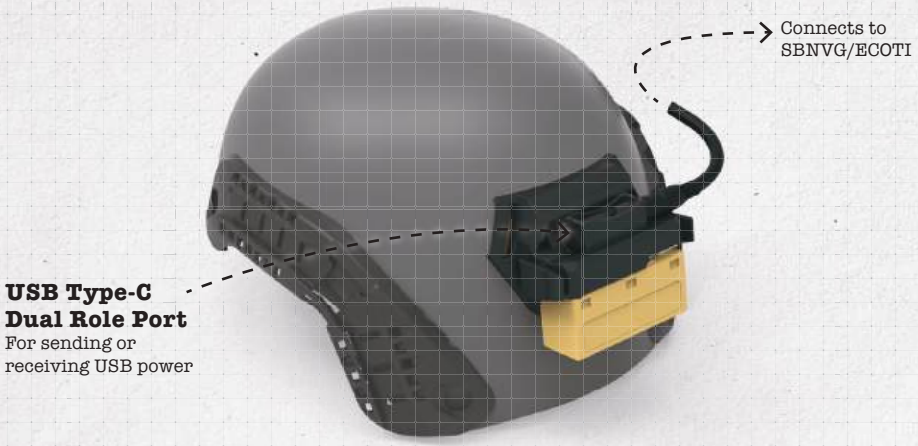

## SPECIFICATIONS

| | |
|---|---|
| **Frequency Range** | S-Band: 2200-2507MHz<br>L-Band: 1350-1390Mhz<br>C-Band (L): 4400-5000Mhz<br>C-Band (U): 5100-6000Mhz |
| **Pattern** | Omni-directional |
| **Azimuth Beamwidth** | 360 nominal |
| **Gain** | 4dB (6dbi) peak gain |
| **VSWR** | S-Band: 1.5:1<br>L-Band: <1.5:1 |

| | |
|---|---|
| **Polarization Form** | Linear Vertical |
| **Mechanical Form** | GRP Plastic encapsulated |
| **Color** | Black |
| **RF Connector** | SMA Female Straight |
| **Mounting** | 4x 3.2mm circular holes |
| **Weight** | 40g |
| **Size** | 60x70x40mm |
| **RF Power Handling** | 5w |

# STUB SBNVG BATTERY ADAPTER



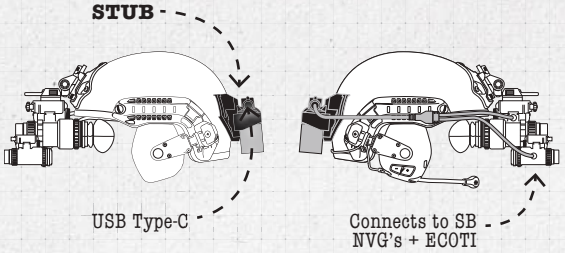




The STUB SBNVG Battery Adapter Provides an interface for the new universal STUB battery platform into both the SB-NVG's as well as an additional USB port that can be used for powering alternative USB devices or for charging the entire system

Part Number
**FA-STUB-KIT-1**

Export Classification
**EAR99**

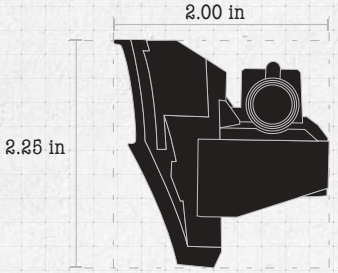
## CONFIGURATION OVERVIEW




## KIT CONTENTS

- USB-C PD wall charger/cable
- Universal carrying pouch
- Universal Mounting Kit (incudes velco & 550 cord)
- *Battery NOT included

## SPECIFICATIONS




## KEY FEATURES

- Twist Lock mechanism flips out to attach/detach batteries and drops back down to lock into place. One handed operation
- Additional USB port for sending or receiving power
- Fits recommended STUB BB-2511 and BB-2512 cells
- On/off button to prevent slow discharge of STUB cell when not in use
- Universal Mounting kit allows for Velcro and/or rail attachment for universal fitment on Standard Issued Helmets (Gentex High Cut/Ceradyne for USMC plus others)

# EUD POWER & DATA (PD) CABLE

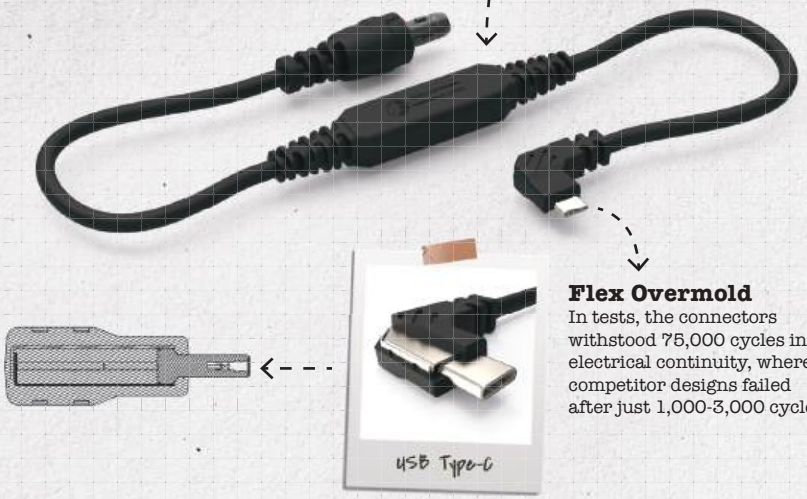
Modular and adaptable, Freedom Atlantic's universal PD cable is designed for direct use with a hub or radio. Featuring the industry's most robust strain relief overmold/conduit design and maximum EMI shielding, it's purpose-built to meet the needs of today's warfighter, ensuring a reliable connection without fail.

Part Number
**S.PCR.PN6C.12.PD1500**

Export Classification
**ECCN 3A611.X**

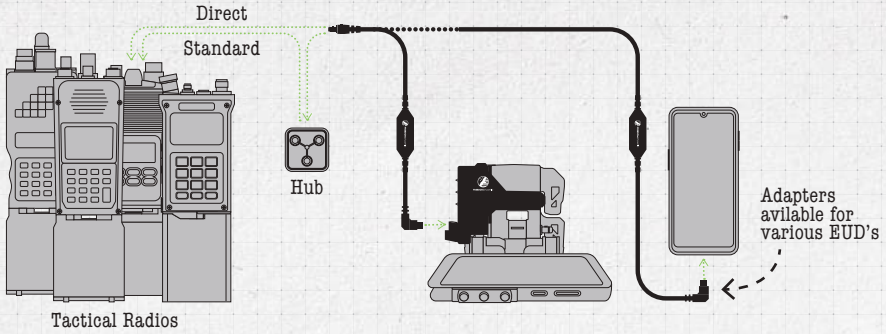
**Radio Connector**
Configurable plug for tactical hubs and radios. Contact a Sales rep to confirm part number.

**Adaptive PD**
Cable will learn its connections and adjust power draw within 100mA increments




**Flex Overmold**
In tests, the connectors withstood 75,000 cycles in electrical continuity, whereas competitor designs failed after just 1,000-3,000 cycles.

## CONFIGURATION OVERVIEW




## EUD ADAPTERS

**Juggernaut™ IMPCT**
Samsung Galaxy S20

**Juggernaut™ OPRTR**
Samsung Galaxy S23 or Xcover Pro 6

## SPECIFICATIONS

-- Customizable Lengths --

*Contact Freedom Atlantic for custom or cable length reccomendations to meet your mission needs.

## KEY FEATURES

- 5, 9 and 12V power to EUD (USB Power Delivery 3.0)
- 100mA to 2A configurable current output
- Adjust charge rates real-time using PD protocol messaging
- Real time power role swapping
- Reconfigurable USB Type C interface: swap between host and peripheral modes

# L3HARRIS PRC-163 DIRECT POWER & DATA (PD) CABLE

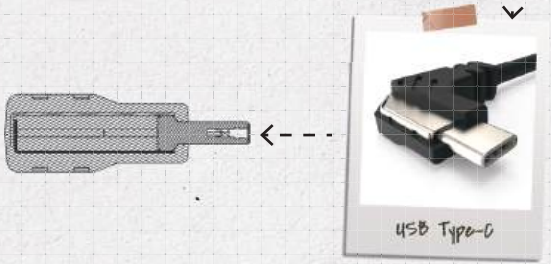
Designed to run in a slick configuration, this cable runs from any Type-C EUD directly to the top or the side of a PRC-163. Set to maximize runtime, this cable will ping the EUD's State-Of-Charge in order to establish a power profile that enables longer overall system runtime.

Part Number
**S.PCR.P012A.30.PD-FER1**

Export Classification
**ECCN 3A611.X**

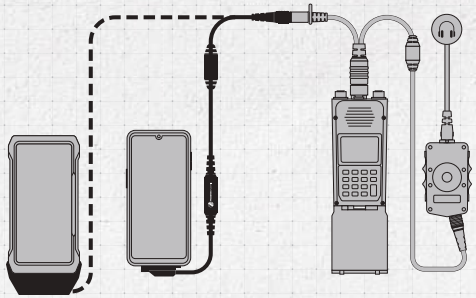
**ODU 12-pin plug**
L3Harris 12-Pin ODU connector with A Keying

**Adaptive PD**
Cable will learn its connections and adjust power draw within 100mA increments




**Flex Overmold**
In tests, the connectors withstood 75,000 cycles in electrical continuity, whereas competitor designs failed after just 1,000-3,000 cycles.

## CONFIGURATION OVERVIEW



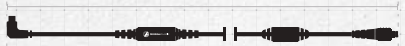
## EUD ADAPTERS

**Juggernaut™ IMPCT**
Samsung Galaxy S20

**Juggernaut™ OPRTR**
Samsung Galaxy S23 or Xcover Pro 6

## SPECIFICATIONS

-- Customizable Lengths --



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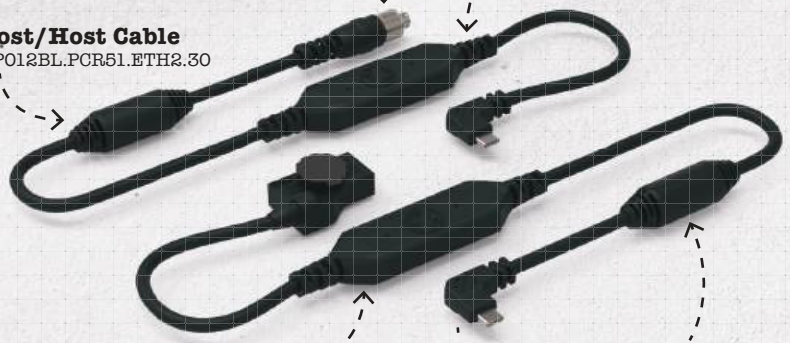
## KEY FEATURES

- 5, 9 and 12V power to EUD (USB Power Delivery 3.0)
- 100mA to 2A configurable current output
- Adjust charge rates real-time using PD protocol messaging
- Real time power role swapping
- Reconfigurable USB Type C interface: swap between host and peripheral modes

**MPU5 PTT Plug**
Fits into exsisting MPU5 PTT

**Double Host Translation**
Seamlessly connects both EUD host and Radio host together

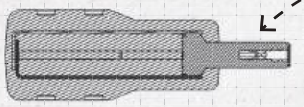
**Host/Host Cable**
S.P012BL.PCR51.ETH2.30



**Ethernet/Host Cable**
S.PERS22-CBL-ETH.PCR51.ETH1.30

**Ethernet Host Translation**
Bridge ethernet connection to a USB devicet

**Flex Overmold**
In tests, the connectors withstood 75,000 cycles in electrical continuity, whereas competitor designs failed after just 1,000-3,000 cycles.



# MPU5 DOUBLE HOST

These two variants of cables allow for users to seamlessly integrate the MPU5 with existing EUDs and system architectures (Nett Warrior). The Ethernet/Host Cable (S.PERS22-CBL-ETH.PCR51.ETH1.30) takes Ethernet from the MPU5 sidehat and translates it to USB. The Host/Host Cable (S.P012BL. PCR51.ETH2.30) acts as a USB to USB bridge that allows both the EUD and the MPU5 to act as a HOST device.

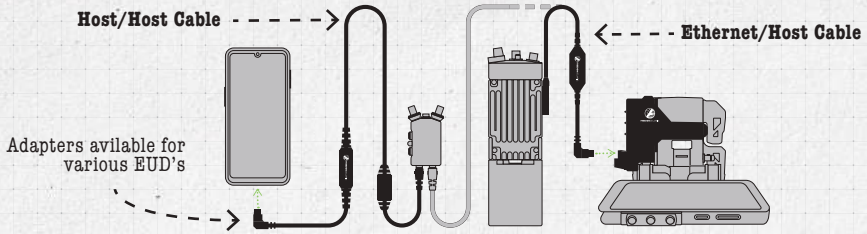
Part Numbers:

Ethernet/Host
**S.PERS22-CBL-ETH.PCR51.ETH1.30**

Host/Host
**S.P012BL.PCR51.ETH2.30**

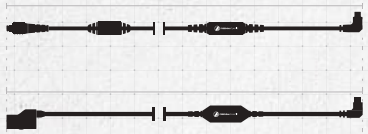
Export Classification
**EAR99**

## CONFIGURATION OVERVIEW




## SPECIFICATIONS

-- Customizable Lengths --



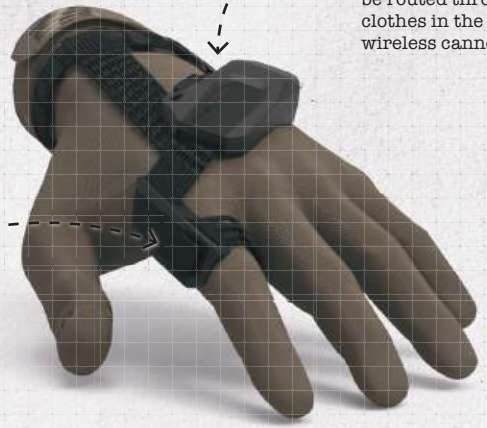
*Contact Freedom Atlantic for custom or cable length reccomendations to meet your mission needs.

## KEY FEATURES

- On the Persistent Systems PTT -> DOUBLE HOST functionality. Uses existing system to provide compatibility with Nett Warrior architecture, allowing both the radio and the EUD to be a host and still communicate.
- Same ruggedization specs on our USB C from before
- Use side port or the PTT port depending on your system needs
- Put the two different Jugg adapters in there too to plug those

Fits over the top of standard glove

**3.5mm Jack**
Optional jack allows a redundant cable that can be routed through the clothes in the event that wireless cannot be used



**Wireless Activation**
Key channel from the MPU5 PTT while keeping your hands on the job.

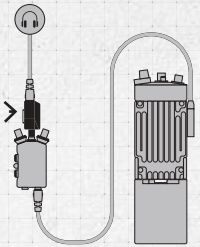
# MPU5 HAHO PTT MODULE

Wirelessly connect your MPU5 to an over-the-glove PTT in order to provide maximum flexibility without the bulk. PTT options include standard Bluetooth for training as well as an Inter-Soldier Wireless (ISW) version for secure operations.

Part Number
**BLUETOOTH: FA.PTT.MPU5HAHO-BT**
**ISW: FA.PTT.MPU5HAHO-ISW**

Export Classification
**EAR99 + ITAR (ISW)**

## CONFIGURATION OVERVIEW

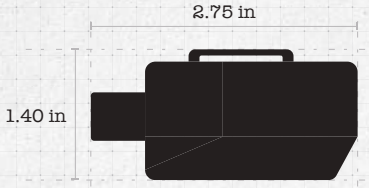


**Wireless Transceiver**
Module fits inline with existing MPU5 cable

## KEY FEATURES

- Single channel wireless remote PTT
- Low profile PTT button allows users to key their radio while maintaining positive control on parachute toggles
- Designed to install over-the-top of existing operator gloves
- 2 versions: Bluetooth low energy and Inter-Soldier Wireless
- Embedded receiver in radio to body-worn PTT interconnect cable
- Users can key channel from remote PTT or from body-worn PTT

## SPECIFICATIONS




*Contact Freedom Atlantic for custom or cable length reccomendations to meet your mission needs.

# MPU5 PTT CABLE

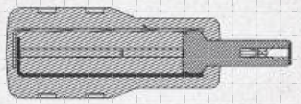
Connect any USB Type-C EUD direct to the MPU 5 PTT for full functionality.

Part Number
**S.PCR56.P012BL.23**

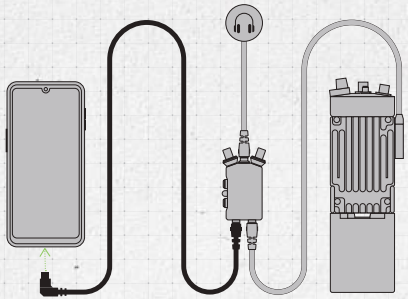
Export Classification
**EAR99**

**Peripheral Mode for EUD**
Designed to be use with MPU5, allowing the EUD to run as a peripheral

**Flex Overmold**
In tests, the connectors withstood 75,000 cycles in electrical continuity, whereas competitor designs failed after just 1,000-3,000 cycles.



## CONFIGURATION OVERVIEW



## KEY FEATURES

- Cable puts phone in peripheral mode up to 2A from the PS PTT
- New ODU Twist Lock connector to PTT

## EUD ADAPTERS

**Juggernaut™ IMPCT**
Samsung Galaxy S20

**Juggernaut™ OPRTR**
Samsung Galaxy S23 or Xcover Pro 6

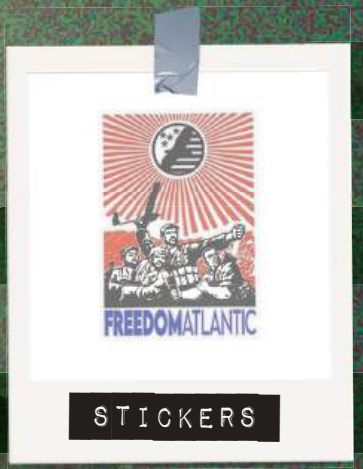
## SPECIFICATIONS

-- Customizable Lengths --

*Contact Freedom Atlantic for custom or cable length reccomendations to meet your mission needs.

# DONT FORGET THE MERCH!

**https://freedom-atlantic.com/merch/**



ALTA TENSION
ALOHA
MAGIC
PELIGRO DE MUERTE
ALTA TENSION

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