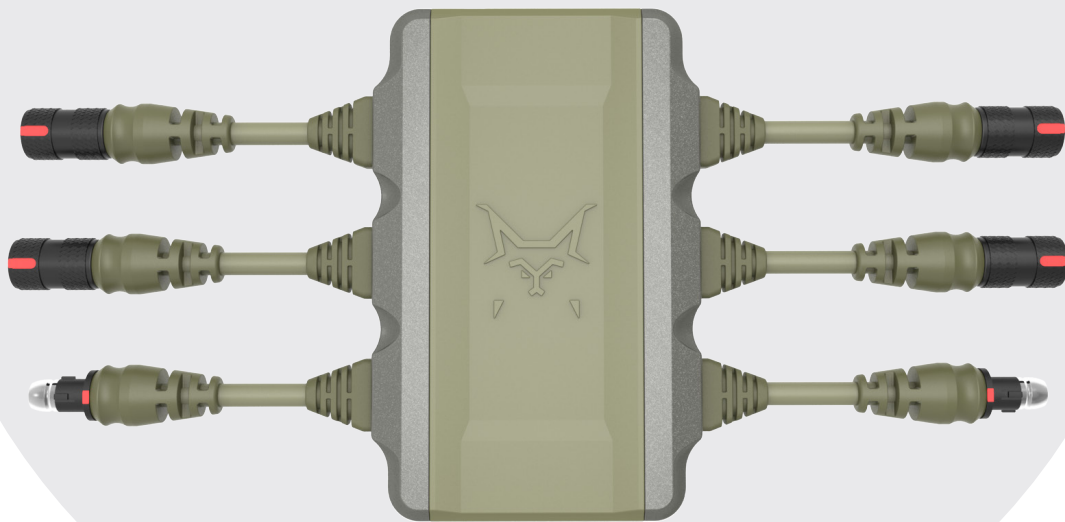


ULTRA.



UltraLYNX wearable data and power architecture

Smarter technology at the tactical edge



Key features

- Greater ergonomic flexibility
- High level of system scalability via 'daisy chained' hubs
- Seamlessly integrates data with Battle Management Apps
- Open architecture complies with GSA and Nett Warrior standards
- Supports any End User Device
- Each hub connects up to 6 devices with simple plug & play
- Bearer, power source and connector agnostic
- Ruggedised for operational use and fully submersive

Overview

Today's modern operational landscape is constantly evolving, placing even greater burden on the user. UltraLYNX is a key component in the realisation of future dismounted situational awareness systems.

With improved connectivity, it provides increased operational tempo, agility and effectiveness and more efficient force application in a Combined, Joint, Interagency, Intergovernmental and Multinational Command (CJIIM).

Designed from the ground up to deliver smart, open architecture, UltraLYNX provides the definitive standard for future soldier systems and delivers a truly integrated, scalable and open solution to meet current and future close combat challenges head on.



Features and specifications

Intelligent power management

Devices can be supplied from a central power source, typically a Lithium Ion battery. Use of technologies, including wireless charging, extends mission operability.

User has control of the sources and loads that are connected as each port can individually switch power to and from the central power bus.

Data management

When operating as a smart hub, USB device drivers and message routing can be installed locally. Customisation of the End User Device (EUD) is no longer required.

The EUD operates in device mode and network connectivity is achieved via reverse USB tethering. We also support applications where no EUD is required, for example, autonomous sensing or minimal user interaction.

General hub specifications		
Hub modes	Embedded host ('smart') An embedded application processor is the USB host (ready to support advanced future architectures). The EUD (if present) can be either a USB host or USB device	Expansion 'dumb' 1. An external EUD is the USB host (plug and play support for current in-service architectures). 2. Facilitates 'daisy-chaining' of UltraLYNX hubs
PAN ports	<ul style="list-style-type: none"> 6 GSA and NETT Warrior compatible smart PAN ports; 2x dual role (USB OTG) High level of system scalability via 'daisy chained' expansion hubs Robust circuit protection (overcurrent/overvoltage/reverse voltage) 	
Power input (all ports)	Primary and secondary batteries, auxiliary and scavenged power sources. 8-36V DC VBATT power input on all ports (multiple simultaneous power sources). 5V DC hold-up power input on two ports	
Data Bus	USB 2.0 high-speed MTT hub; 6x DFPs or 5x DFPs + 1x UFP. Data function of each port individually switchable between USB and SMBus	
USB-C PD	2x USB-C power delivery capable ports; enables EUD sinking host functionality	
HMI	Built-in-test/status LED	
Power consumption	Dumb: 0.7W typical, 1.0W max	
	Smart: 1.0W typical, 1.5W max	
Dimensions	125 x 79 x 17 mm (4.9 x 3.1 x 0.7 in)	
Weight	200g (7.1oz)	
Colour	Tan 499, black	
Certifications	MIL-STD-810G, MIL-STD-461G, DEF STAN 00-35, IP68, CE, RoHS	
Temperature	Operating: -20 to 55°C (-4 to 131°F). Storage: -46 to 71°C (-51 to 160°F)	
Immersion	2 metres for 60 minutes; fully functional with connectors mated or unmated	
Reliability	MTBF: 20,000+hrs; high level of internal BIT coverage. Reversionary mode ensures availability of power	

Application processor specifications	
CPU	Low-power 700MHz ARM Cortex-A
Memory	512mb RAM, 8gb non-volatile memory
Operating system	Custom embedded Linux OS; sub 10s boot time SDK and power API available for 3rd party integration
Platform security	Software integrity verification and secure high assurance boot. Hardware cryptographic acceleration support
WPAN options	Bluetooth v4.2 (BR/EDR/BLE); central and peripheral cable
Sensors	On-board 6-axis IMU

