

# TECHNICAL SPECIFICATIONS

	UfukLink Micro	UfukLink Mini	UfukLink Mini Pro
<b>General</b>			
Data Rate	Up to 40Mbps	Up to 60Mbps	Up to 100Mbps
	Note: Depends on RF output power & antenna gains		
Modulation	BPSK/QPSK/16QAM/64QAM	QPSK/16QAM/64QAM/256QAM	
Network Mode	P2P/PTMP (with licence)	MESH Network	
Channel BandWidth	2.5/5/10 MHz		2.5/5/10/20 MHz
RF Output Power	2x2W/2x4W/2x10W/2x20W		
Communication Distance	Up to 200 Km		
	Note: Under LOS condition and depends on antenna setup		
Encryption	AE128/256		
Anti-Interference	Smart Frequency Selection	Autonomous Frequency Hopping	
<b>Frequency Bands</b>			
L Band	1300 - 1500 mHz		
S Band	1800 - 2500 mHz		
C Band	4400 - 6000 mHz		
<b>Environmental</b>			
Operation Temperature	-40°C / +80°C		
Protection Level	IP66/IP67 Customized		
<b>Mechanical</b>			
Size	118 x 62 x 20 mm (2x2W Platform)		
	128 x 110 x 34 mm (2x10W, 2x20W Platform)		
	183 x 154 x 63 mm (2x10W, 2x20W Base)		
Weight	150 gr (2x2W Platform)		
	630 gr (2x10W, 2x20W Platform)		
	1560 gr (2x10W, 2x20W Base)		
	Note: Frequency bands effects on weight and sizes		
<b>Power</b>			
Supply Voltage	12 - 36 VDC		
Power Consumption	2A (max) / 0.7A (idle) @ 12V (2x2W)		
	6A (max) / 0.9A (idle) @ 16V (2x10W)		
	10A (max) / 0.9A (idle) @ 20V (2x20W)		
<b>Interface</b>			
RF Antenna	2xTNC on Base Models - 2xSMA on Platform Models		
Basic Serial	RS232 / RS485 / RS422 / SBUS Support Optional		
Network	10/100 Base Ethernet		



## CONTACT WITH US

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MICRO / MINI / MINIPRO



- Autonomous and Semi-autonomous Vehicles
- Near and None LoS Conditions
- Swarm Applications with MESH
- Enlarge Coverage with Relay
- Land, Sea and Air Platforms
- Broadband Communication
- Handheld, Airborne, Backpack, Vehicular,...





SWARM concept is rapidly emerging. Information sharing between peers is the key. Also in broadband. Based on IP infrastructure. CTech's LOS/nLOS technology combines small units into giants.

MESH network topology provides easily connecting. Directly, dynamically and non-hierarchically. Many nodes can cooperate with one another, to efficiently route data to and from nodes.

With RELAY capability of the radio modems, the operation coverage spreads beyond the Ligth-of-Sight.

None Light-of-Sight performance of the CTech's LOS/nLOS technology can turn impossible missions into success.

## BENEFITS

- ✓ Remote Control and Monitoring Autonomous and semi-autonomous vehicles
- ✓ All kind of land, sea, and air mobile platforms
- ✓ MESH topology for SWARM applications
- ✓ Extend the operational coverage area with Relay functionality
- ✓ Broadband for High Quality Video Streams
- ✓ Full Duplex, Low Latency, Stream and Control Data
- ✓ SWAP options: Handheld, Airborne, Backpack, Vehicular,...
- ✓ Near and None Ligth-of-Sight
- ✓ Uses Free L, S and C Band.

Many models for many different conditions:

### Technical Specs

- L / S / C Bands
- 2x2W / 2x4W / 2x10 W / 2x20W
- Platform / Base Cases
- Up to 100Mbps
- AES 128 / 256
- Video IF (optional)
- Up to 200Km (LoS) depends on antenna setup

**UFUK link MICRO**

- P2P / P2MP
- Up to 10MHz BW

**UFUK link MINI**

- MESH Network
- Up to 10MHz BW

**UFUK link MINI Pro**

- MESH Network
- Up to 20MHz BW

## SWARM

Unmanned surface vehicles encounter very alterable Ligth-of-Sight coverage conditions, whether close to shore, offshore or behind an island. A given RELAY capability to an UAV, connects a MESHed SWARM to the control center. Broadband connection provides to the operators a high quality video streams. As a result small things get together, and overcome big things.

It is the ability of organizing and coordinating between small things that turns them into unmanageable giants.

## SWAP OPTIONS

Offering the same features in various size, weight and power options is a key feature to cope with application diversity. Handheld and backpack versions for a soldier to carry. Small size and weight for Drones. High power vehiculars, on air, on land, also on surface.

## MESH NETWORK

During an air operation, it is nearly impossible to stay in safe communication with the UAVs that are moving away, approaching, rejoining, or changing locations.

The MESH network capability of the UFUKLink radios easily brings UAVs together. The processes such as breaking away from the group and rejoining it, which develop under operational conditions, occur almost invisibly. The operator does not concentrate on staying together, but on using the power of being together towards the goals of the operation.

## NEAR/NONE LOS

While battling the difficulties of the operation on the one hand, it is almost impossible to provide Ligth-of-Sight conditions for communication on the other. The extra value of the NONE Ligth-of-Sight performance, pushes the boundaries between success and the impossible.

## LONG RANGE

Tracking Antenna

