

50 m Antenna



38 km Coverage

HARC-Tethered Drone adds dramatic network and comms range extension to your drone

A lightweight expeditionary system, HARC-TD-50 flies an antenna for your UHF radio as high as 50 m (150 ft) above ground level (AGL) at density altitudes up to 3600 m (12,000 ft). The HARC-TD drone is small, minimizing visual profile when flying, quiet, and safe to handle. The airborne drone is electrically powered via its tether and can fly indefinitely, for hours or days.

With HARC-TD-50, your radio stays on the ground while the antenna is high overhead. HARC-TD-50 is optimized for network/data/voice comms with military and civilian radios.

To deploy HARC-TD, connect a vehicle battery or generator power, connect your radio's antenna port, and press the "Up" button. The drone rapidly ascends to a user-set altitude and keeps station indefinitely. If ground power is interrupted, the drone safely and rapidly descends using its on-board backup battery. When your comms are completed, minutes or days later, press the "Down" button and return the drone to the ground.

**Let a tethered drone extend
your communications range**

HARC-TD-50

- **Radio/waveform independent**
- **Persistent, flies indefinitely**
- **Highly portable, safe to handle**

SYNTONICS



Communication Innovations in the RF Domain

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Product Characteristics:

Radio range to horizon	38 km (20 miles)
Frequency Range	225-470 MHz
Waveforms including	SRW, ANW2, P25, TETRA, EPLRS, FM voice, others
Radios including	PRC-117, PRC-148, PRC-152, PRC-153, PRC-154, PRC-155, civilian radios
RF Connector	TNC
RF Input Power	1-5 W 20 W Survivable

Electrical & Mechanical:

System Power	12-32 Vdc or Universal AC
User power supply	Adequate for 1 kW load
Drone power	800W @ 15.5 Vdc
Operating altitude	50 m (150 ft) AGL
Max. density altitude	3600 m (12,000 ft) ASL
Temps, Operating	-10 to +60 C
Temps, Storage	-40 to +80 C

Note: Consult Factory for suitable drones



Comms over Terrain



Comms from Shore-to-Ship



Comms into Urban Canyons

Other FORAX-HARC configurations are available

	HARC-Mini	HARC-2S1U	HARC-4S2U
Radios supported	<ul style="list-style-type: none"> 1-Any half-duplex radio, any waveform, 225-470 MHz 	<ul style="list-style-type: none"> 1-VHF or SINCGARS retrans pair (SNAP interface included) 1-UHF, any waveform (e.g., ANW2, SRW, EPLRS, voice) 	<ul style="list-style-type: none"> 4-VHF including SINCGARS (SNAP interface included) 2-UHF, any waveform (e.g., ANW2, SRW, EPLRS, voice)
Airborne weight	<ul style="list-style-type: none"> ~ 2.7 kg with UHF antenna 	<ul style="list-style-type: none"> ~ 16 kg with antennas & cables 	<ul style="list-style-type: none"> ~ 43 kg with antennas & cables
Packaging	<ul style="list-style-type: none"> Weathertight module 	<ul style="list-style-type: none"> Weathertight Chassis 	<ul style="list-style-type: none"> Modular in aerostat's enclosure