

# FORAX-HARC-Mini

Fibre Optic Remote Antenna Extension  
RF over Fibre



## Extended Range for Emergency Radio Comms

It's an emergency and you are in the field. Even when you bring along a 30 m transportable antenna tower, you always want more range for your radios; and now there is a solution for extending that distance: fly an antenna high overhead using HARC-Mini.

HARC-Mini answers the need for a field expedient solution to lofting a radio antenna as high as 150 m. With configurations weighing as little as 1.25 kg plus antenna, just add a small balloon - or even a lifting kite - and you are communicating. Communications have good margin out to 40 km from 150 m over level ground.

Lightweight, modular HARC-Mini antennas are easily changed in the field. The specific antenna you need is snapped on in seconds. Antennas are already available for several frequency bands in the 30-512 MHz range, and antennas up to 2 GHz are imminent.

HARC-Mini is optimised for Half-Duplex (Push-To-Talk) radios operating with any land mobile radio including P25, TETRA, heritage trunking systems, VHF voice, UHF voice, and AM. Various battery sizes and external power options are available, making HARC-Mini universally configurable.



HARC-Mini on small helium balloon

Tether with optical fiber



Radio at Command Post



Wide-area comms to balloon's visual horizon



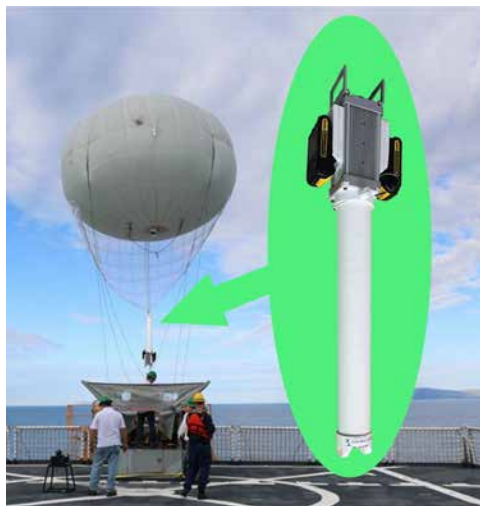
Comms into canyons, over terrain

## Electrical Specifications

<b>Frequency Range</b>	30–512 MHz
<b>RF Connectors</b>	TNC
<b>RF Input Power</b>	1–5 W 20 W Survivable
<b>RF Transmit Power</b>	2 W (30–512 MHz)
<b>Fibre Type</b>	One single mode fibre
<b>Fibre Connector</b>	SC-APC
AIU includes weather-tight connector features	

## Environmental Specifications

<b>Dimensions</b>	
• <b>Width</b>	12.7 cm
• <b>Depth</b>	8.3 cm
• <b>Height</b>	25.4 cm
<b>Weight (without batteries)</b>	1.25 kg
<b>Operating Temperature</b>	- 10°C to + 60°C
<b>Storage Temperature</b>	- 40°C to + 80°C



Other FORAX-HARC configurations are available, for larger aerostats

	HARC-4S2U	HARC-2SIU	HARC-WNW
<b>Radios Supported</b>	<ul style="list-style-type: none"> <li>• 4-VHF including SINGARS (SNAP interface included)</li> <li>• 2-UHF, any waveform (eg ANW2, SRW, EPLRS, voice)</li> </ul>	<ul style="list-style-type: none"> <li>• 2-SINGARS retrans pair (SNAP interface included) or 1-VHF</li> <li>• 2-UHF, any waveform (e.g., ANW2, SRW, EPLRS, voice)</li> </ul>	<ul style="list-style-type: none"> <li>• 1-WNW (GMR RFCB connectivity included)</li> </ul>
<b>Airborne Weight</b>	~ 43 kg with antennas + cables	~ 16 kg with antennas + cables	~ 15 kg with antennas + cables
<b>Packaging</b>	Modular Form Factor	Lightweight Form Factor	Lightweight Form Factor

September 2018

All specifications are subject to change without notice  
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



sales@eylex.com.au  
www.eylex.com.au

