

HeliARX

Broadband, Seamless and Resilient SATCOM for Critical Missions

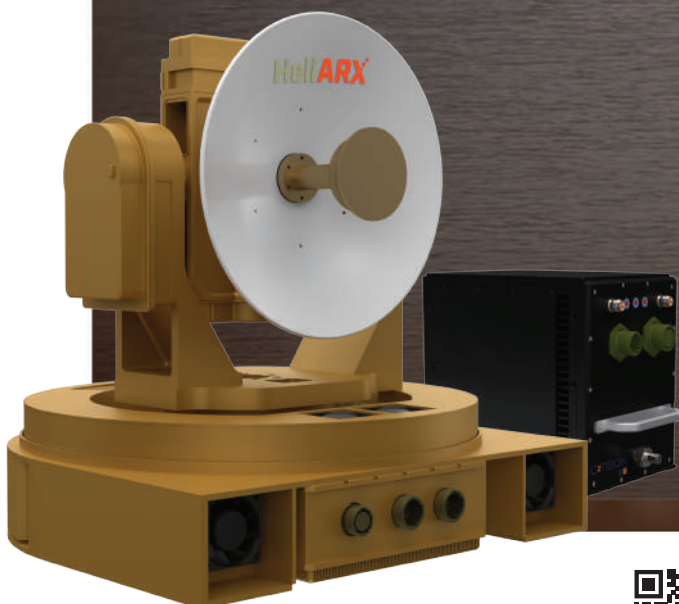
HeliARX is engineered to provide robust, real-time broadband communication for manned and unmanned helicopter operations in mission-critical airborne environments. Supporting applications such as intelligence, surveillance, and reconnaissance (ISR), HeliARX ensures continuous connectivity under demanding rotary-wing conditions.

Key Features

- Signal Transmission Through Rotor Blades
- Interoperability with Land, Naval and Air Forces
- High-Speed Azimuth/Elevation and Cross Elevation (4-axis) Tracking
- P2P and P2MP Support
- Global Operational Capability
- Ruggedized for Harsh Environments

Operational Advantages

- Ensures Continuous Communication Despite Rotor Blade Interference
- Supports Secure, Real-Time Command and Control (C2) Functions
- Stay Connected Anywhere with Broadband Satellite Links that Keep Your Missions Flexible and Ready for Anything



SATCOM Terminal



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Antenna Technical Specification	Definition
Ku-Band RF Input / Output Frequency	RX:10.95 - 12.75 GHz TX: 13.75 - 14.5 GHz
Communication Protocol	OpenAMIP, Ethernet (UDP)
BUC	50W
EIRP	43.4 dBW@14 GHz
G/T	6.3 dB/K@11.7 GHz
Polarization	Linear (Vertical + Horizontal)
Power Consumption (W)	554 W (Nominal)
Peak Power Consumption (W) @28VDC	625 W
Operating Voltage	Nominal 28VDC 18 - 32 VDC 50 ms Hold-up
SOTM Antenna Total Weight	46.7 kg
Operational Temperature	-40°C / +85°C
Storage Temperature	-40°C / +85°C
Azimuth	360° (Continuous)
Elevation	0° to 90°
Polarization	+/-135°
Cross-Elevation	+/-13°
Azimuth Velocity / Acceleration	150° / sec - 200° sec²
Elevation Velocity / Acceleration	150° / sec - 200° sec²
Polarization Velocity / Acceleration	150° / sec - 200° sec²
Cross-Elevation Velocity / Acceleration	150° / sec - 200° sec²
Dimensions	480 x 480 x 570.6 (mm)
Standards	MIL-STD810H, MIL-STD704F, DAL-D, MIL-STD461E, ITU-R S-728-1, DO-160G

Modem Technical Specification	Definition
L-Band TX Output Frequency	950 - 2150 MHz
L-Band RX Input Frequency	950 - 2150 MHz
Communication Waveform	Shading Resistant CTech Waveform
Communication Protocol	OpenAMIP
Data Rate	Up to 40 Mbps
Data Encryption / Decryption	AES-256 (Configurable)
RF Interfaces	L-Band RF TX - TNC, 50 Ω L-Band RF RX - TNC, 50 Ω
Control/User Data Interface	MIL-STD-38999 Ethernet – M&C / MIL-STD-38999 Ethernet – Layer 2 Traffic Interface
Power Consumption @Operating Voltage	Nominal: 100W @28VDC
Operating Voltage	Nominal 28VDC 18-32VDC, MIL-STD-704F
Instantaneous Power Failure Hold-up Time	<50ms
Chasis Dimensions	1/2 ATR Enclosure
Weight	4.9 kg +/- 5% gram
Operating Temperature Range	-40°C / +70° C
Storage Temperature Range	-40°C / +85° C
Features	ACM, QoS, Audio Input for Push-to-Talk, EMCON
Mechanical Protection	IP66
Internal Reference / DC Voltage	10 MHz internal reference in RX and TX line 22 kHz tone, 13/18V DC in RX line
ModCods	BPSK to 8PSK
Standards	MIL-STD810H, MIL-STD704F, DAL-D, MIL-STD461E, DO-160G