



AirTRx™ Modem

Ruggedized unit for pressurized and depressurized aircraft cabins

Full support for iDirect's airborne satellite communications

The AirTRx™ modem integrates iDirect's Evolution® Satellite Router Board with a weatherproof enclosure that complies with the Radio Technical Commission for Aeronautics (RTCA) DO-160 F/G standard and complements Orbit's field-tested airborne VSAT terminals in X, Ku and Ka bands.

The modem is part of the AirTRx family of innovative airborne stabilized VSAT systems. Designed to accommodate the regional and global coverage needs of the airborne market, AirTRx supports Ku, Ka and X frequency bands. By providing outstanding RF performance and dynamic response under the most challenging conditions, it meets the broadband needs of mission aircraft, commercial and business jets, as well as helicopters.

As customers demand more complex, compact, reliable and comprehensive broadband infrastructure to support audio, video and data services, Orbit continues to invest heavily in R&D to maintain and enhance its position as a leading provider of flexible advanced systems suitable for any airborne application.

With more than 1,600 airborne systems in operation globally, Orbit's customers include aircraft manufacturers (including helicopters and UAVs), airborne systems integrators, communications service providers, government agencies and armed forces.

Integration with all AirTRx solutions

Parabolic

30, 34, 46 and 60cm circular-antenna terminals optimized for SWaP and multi-band operation (by swapping RF front ends by frequency band)

Low-profile

28cm-high terminals available in Ku, Ka and Ku/Ka auto-switching configurations

Key features

- Optimized for aero applications
- DO-160 F/G certification
- Based on iDirect e800 for star and SCPC topologies
- Fully integrated with Orbit AirTRx and MPT product lines
- Integrated RF tracking unit
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- Compact and lightweight
- 28V DC with range of 22-30V DC



AirTRx™ Modem Specifications

Parameters	Specification
Frequency range	Tx: 950 - 2000 MHz; Rx: 950 - 2000 MHz
Rx input power	-65 ÷ 0 dBm
Tx output power	-35 ÷ +5 dBm
Maximum downstream data rate	38.5 Mbps
Maximum upstream data rate	20 Mbps
Input / output data signal	IP
Weight	6 Kg
Dimension (LxWxH)	315 x 301.5 x 90 cm
RF connector type	N-type female
Operating temperature	-40 to +50°C
Humidity	95%
Altitude	35,000 feet
Communication	LAN Ethernet or RS232
LNB voltage	13V or 17V
LNB control	22 KHz tone, DiSEqC burst 0, 1
Frequency range	950-2150 MHz
Frequency resolution	1 KHz
IF bandwidth	1 KHz to 300 KHz
Lowest C/N for tracking	40 dBHz
Signal strength indicator digital readout resolution	0.01 dB
Signal to Noise Ratio (SNR) digital readout resolution	0.01 dB
Digital readout bandwidth	1 KHz

