



## AVIAT ODU 600

The Aviat ODU 600 is the industry's first universal ODU with Flexible Power Mode (FPM) - providing software defined base or high power modes of operation in a single platform. This unique scalability allows operators to pay for the power they need, when they need it, improving product lifecycle costs that cannot be achieved by using discrete fixed power mode ODUs. The ODU 600 balances both performance and cost optimization for public or private network operators deploying packet and/or TDM services to fixed, nomadic or mobile devices.

### HIGHLIGHTS

- Industry's first universal ODU to support software defined base and high power modes in a single ODU with Aviat Networks unique Flexible Power Mode (FPM) capability
- Highest transmit output power in its class of ODU across multiple frequency bands (6-38 GHz)
- Interoperates with the Eclipse™ ODU300 series to facilitate easy upgrade and evolution
- Compatible with the Eclipse IDU and INU transport and switching platforms
- Compact, power efficient design, with scalability up to 1024 QAM modulation
- Supports concurrent, ACM (Adaptive Coding & Modulation) & XPIC (Cross Pol. interference Cancellation) operation
- Can be deployed in 1+0 unprotected, 1+1 MHSB (Monitored Hot Standby), 1+1 SD (Space Diversity) and 2+0 XPIC (Cross Pol. Interference Cancellation) configurations

### PERFORMANCE & COST OPTIMIZATION USING FLEXIBLE POWER MODE

The Aviat ODU 600 is the first radio to be equipped with Flexible Power Mode (FPM) which delivers software-selectable base or high power modes of operation in the same unit. This allows operators to optimize costs AND performance. With FPM, operators can deploy a standard power radio initially, and upgrade to high power (licensed-based) only when needed, thereby reducing initial CAPEX spending. The inherent economy of a single-box flexible power solution also helps streamline OPEX, with acute benefits for sparing and inventory management. The overall impact is a lower total cost of ownership.

The Aviat ODU 600 delivers best-in-class output transmit power across multiple frequencies, making it a highly attractive and competitive platform that builds on Aviat Networks ongoing radio innovation leadership. Increased power provides the flexibility to adjust for increased availability, throughput and/or distance. This performance translates directly into reduced antenna sizes, thereby driving down equipment capex and the opex contribution of tower leasing and maintenance.



### KEY FEATURES

- Operating frequencies 5, 5.8, L6/U6, 7/8, 11, 13, 15, 18, 23, 26 and 38 GHz
- FIPS 140-2 Level 2 validated; FIPS 197 validated
- High throughput per T/R, per polarization:
  - Up to 462 Mbit/s data
  - Up to 127xDS1 or 4xDS3 or 1xOC-1
- Flexible Power Mode (FPM) for software defined base power and high power modes in the same unit
- Transport options- Carrier Ethernet, PDH/SDH/SONET or Hybrid (mixedmode Carrier Ethernet + PDH/SDH/ SONET) in a single radio channel
- Full 256QAM Adaptive Coding and Modulation (ACM) - scalable up to 1024 QAM
- Configurations available: NP, MHSB, MHSB SD, 2+0 XPIC



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## SYSTEM PARAMETERS

GENERAL						
Frequency Band Options						5, 5.8, L6/U6, 7, 8, 11, 13, 15, 18, 23, 26, 38 and 42 GHz
Capacity Range	Airlink Capacity					11 - 365 Mbit/s
	Ethernet / IP Throughput					11 - 462 Mbit/s
Modulation Options	Native TDM					7-127xDSI; 1,3,4x DS3; 1xOC3
	Fixed/Adaptive					QPSK, 16, 32, 64, 128 and 256 QAM*
Channel Sizes						10, 20, 30, 40, 50 and 80 MHz
Configuration options						NP (1+0), Protected SB (1+1), Protected SB w/SD, XPIC
CONNECTORS						
IF Cable connector						N-Type
Antenna Port Interface						Direct Antenna Mount
SYSTEM	5 GHz	5.8 GHz	L6/U6 GHz	7/8 GHz	11 GHz	13 GHz
Frequency Range, GHz	4.4-5.0	5.725 -5.850	5.925 - 6.425 6.425 - 7.11	7.125 - 7.9 7.725 - 8.5	10.7 - 11.7	12.75 - 13.25
T-R Spacings supported, MHz	300, 312	84	252.04 340	150, 154, 161, 168, 175, 196, 245 119, 126, 151,614, 195, 208, 266, 300, 310, 311.32, 305.56, 360	490, 530	266
Maximum Tuning Range (dependent upon T-R spacing), MHz	56	56	56	56/140	165	84
SYSTEM	15 GHZ	18 GHZ	23 GHZ	26 GHZ	38 GHZ	
Frequency Range, GHz	14.4 - 15.35	17.7 - 19.7	21.2 - 23.632	24.52 - 26.483	37.0 - 39.46	
T-R Spacings supported, MHz	315, 420, 490, 640, 644, 728	1010, 1092.5, 1120	1008, 1200, 1232	1008	812	
Maximum Tuning Range (dependent upon T-R spacing), MHz	245	380	370	360	370	
TRANSMITTER SPECIFICATIONS						
Manual Transmitter Power Control range	Dependent on Configuration					0 - 25 dB
Automatic Transmitter Power Control						Configurable over full available manual attenuation range
Transmitter Mute						> 50 dB
RECEIVER SPECIFICATIONS						
Frequency Stability						± 5 ppm
Receiver Overload/Max Receiver Input Level	BER=1x10 <sup>-3</sup>					-24dBm
Residual (Background) Bit Error Rate						10 <sup>-13</sup>
STANDARDS COMPLIANCE						
EMC						FCC CFR47 Part 15
Operation						EN 300 019, class 4.1
Safety						UL60950-1, UL60950-22
RF Performance	All federal frequencies Manual of Regulations for Federal Radio Frequency Management 5.8GHz					FCC CFR47 Part 101 (for L6GHz and above)
Water Ingress						Relevant sections of FCC CFR 47, Part 15.407, RSS-210 <sup>7</sup>
Lightning Protection						IEC 60529 (IPx6)
Electric power substations						Internal, compliant to IEC 61000-4-5, class 5
						IEEE 1613
SECURITY COMPLIANCE						
Security and Encryption	With Eclipse INU/INUe		Optional FIPS 197 validated 128/256-bit AES encryption			
	With Eclipse INU/INUe		Optional FIPS 140-2 Level 2 validated			
ENVIRONMENTAL						
Operating Temperature	Guaranteed					-27 to +131oF
	Extended					-58 to +131oF
Humidity	Guaranteed					100%
Altitude	Guaranteed					15000 ft.
ELECTRICAL AND MECHANICAL						
Power						6-11 GHz <50 Watts, 13-38 GHz <40 Watts
Size						10.4 in x 10.4 in x 4.9 in
Weight						11 lbs.

All specifications preliminary, and are typical values unless otherwise stated, and are subject to change without notice.  
\*1024QAM-ready, when supported by indoor unit