

ATLAS[®] 1200 P25 Station



Compact scalable station that enables flexible deployment options in a robust and reliable next generation platform.

The ATLAS 1200 P25 Station offers market-leading analog and P25 mixed-mode capabilities in a robust, reliable, and compact form factor. The ATLAS 1200 is designed and built to exceed industry standards and specifications, and is available in VHF, UHF and 800 MHz.

FLEXIBLE ARCHITECTURE

- Leverages a common hardware platform to support multiple operating modes including Analog Conventional, P25 Conventional and optional Console interface
- Compact 2RU form factor maximizes rack space usage
- Flash based software design allows future upgrades for new features

TRANSPARENT MODE

- Repeats Mixed Mode, P25 Digital & analog transmissions, Automatically switch to P25 mode on reception of P25 carrier
- Passes P25 NAC unchanged
- Passes P25 private call and group call in clear or AES-256 encrypted
- Front panel indicators show P25 status
- Benefits of Digital Audio Performance
- Tone Remote Control with E&M, 2 / 4 wire audio interface.
- Programmable External PTT mode (P25 or Analog)
- AMBE™ 2+ Enhanced Vocoder
- P25 Digital audio to speaker & line
- P25 Digital audio from microphone socket & line

OPTIONAL FIXED STATION INTERFACE (FSI)

- Ethernet interface with digital audio or digitized analog audio
- DFSI P25 Stream AMBE™ and DFSI Analog Stream G711
- Passes through P25 encrypted to Ethernet
- Conforms to Standards to TIA102-BAHA



ATLAS® 1200 P25 Station

TECHNICAL DATA

GENERAL	VHF	UHF	800 Mhz
Mounting		19" rack or shelf	
Dimensions (HxWxD)		3.5" x 19" x 13"	
Weight		20 lbs.	
Temperature Range		-30°C to +60°C	
Input Voltage	13.8VDC ±10%		13.8VDC ±10% and 27.6VDC ±10%
Power Consumption	100 W Tx - 220 W 15 W Rx		100 W Tx - 300 W 15 W Rx
Frequency Resolution		12.5 kHz	
FCC Compliance		Parts 15 and 90	
Number of Selectable Channels		16	

TRANSMITTER	Analog		Digital		Analog		Digital	
Frequency Range	148-174 MHz				450-485 MHz		851-869 MHz	
RF Output Power	50W and 100W, adjustable				100W, adjustable		100W, adjustable	
Duty Cycle					100%			
Output Impedance					50 Ohms			
Spurious Emissions					100 dB			
Harmonic Emissions					100 dB			
Maximum Deviation	± 2.5 kHz	± 3110 Hz	± 2.5 kHz	± 3110 Hz	± 5 kHz	± 3110 Hz	± 5 kHz	± 3110 Hz
Audio Response					As per TIA			
Audio Distortion	2%	N/A	2%	N/A	2%	N/A	2%	N/A
Emission Designators	11K0F3E	8K10F1E, 8K10F1D	11K0F3E	8K10F1E, 8K10F1D	16K0F3E, 14K0F3E	8K10F1E, 8K10F1D		
Hum & Noise (TIA)	45 dB	N/A	45 dB	N/A	50 dB	N/A		
Frequency Stability (-30°C to +60°C)	± 1.5 PPM (Standard) ± 0.5 PPM (with HI Stab option, no external reference generator required)				± 1.0 PPM			

RECEIVER	Analog		Digital		Analog		Digital	
Channel Spacing					12.5 kHz			
Frequency Range	148-174 MHz				450-485 MHz		806-824 MHz	
Sensitivity: 12dB SINAD	-117 dBm	N/A	-117 dBm	N/A	-117 dBm	N/A	-117 dBm	N/A
Sensitivity: for 5% BER	N/A	-117 dBm	N/A	-117 dBm	N/A	-117 dBm	N/A	-117 dBm
Selectivity	72 dB	60 dB	72 dB	60 dB	78 dB	60 dB		
Signal Displacement Bandwidth					± 1 kHz			
RF Input Impedance					50 Ohms			
Intermodulation Rejection					82 dB			
Spurious & Image Rejection					90 dB			
Audio Response (1000 Hz ref.)					As per TIA			
Audio Distortion (at 1000 Hz)	2%	As per TIA	2%	As per TIA	2%	As per TIA	2%	As per TIA
Hum & Noise (TIA)	45 dB	As per TIA	45 dB	As per TIA	50 dB	As per TIA		
Frequency Stability (-30°C to +60°C)					± 1.0 PPM			

STANDARDS COMPLIANCE

ATLAS stations comply with the following standard specifications:

P25 Digital Operation	TIA 102.CAAB-C
Analog FM Operation	TIA 603-D
EMI/EMC	NTIA Manual Chapter 5
PSTN Line Isolation	FCC Part 68 (USA)