



Specifications

Patents: The A20-Nexus is protected by US patents US10678294B2, US20190166523A1, International patent WO2018022209A1, and several patents pending.

RF

- **Tuning**
 - 470 to 1525 MHz (1055 MHz switching bandwidth)
 - 25 kHz steps
 - SpectraBand Technology for maximum rejection of out-of-band signals
 - Available frequencies depend on country of operation
- **Modulation**
 - Proprietary, 100% digital RF modulation
 - Standard or Long Range, selectable per channel
- **Spurious Rejection**
 - >100 dB typical
- **Cascade output**
 - 50 ohm
 - 3.5 dB Insertion Loss from front BNC through rear BNC: It is recommended to use an external powered antenna to overcome the 3 dB splitting loss in the Nexus so that the receivers maintain excellent range.
 - Wideband power split, pre-LNA
- **RF Bias output**
 - 12V, 200 mA each BNC
 - Smart antenna support, Wisycom-compatible

Audio

- **Latency**
 - Standard modulation = 2 ms, analog or digital outputs
 - Long Range modulation = 3.9 ms, analog or digital outputs
- **Audio Frequency Response**
 - 10 Hz–20 kHz, +/- 1 dB relative to 1 kHz
- **Dynamic Range**
 - > 130 dB with A20-Mini as transmitter
- **Output Level**
 - Line-level: +20 dBu for 0 dBFS
 - Mic-level: -20 dBu for 0 dBFS
- **Audio Output Sample Rate**
 - 44.1, 48, or 96 kHz
- **Digital Audio Output**
 - AES3 balanced connection, 110 ohm output impedance
- **Audio-Over-IP**
 - Dante, 44.1 or 48 kHz sample rate

Network

- **Dante Audio-Over-IP**
 - 16 input/output channels
- **Control**
 - Web-based control and monitoring of all Nexus settings
- **Connections**
 - 2x RJ45 ports: For Dante and/or Control. Port 1 supports powering from PoE+
 - 1x SFP: For Dante and/or Control. Compatible with Small Form-factor Pluggable (SFP) network transceivers

Powering

- **Sources**
 - DC Input: dual, redundant (highest voltage takes precedence)
 - PoE+: 802.3at, 30W needed (standard 15W PoE 802.3af will not work)
 - 8-Series (through unit-to-unit connector when docked)
 - AC mains adapter (sold separately)
- **Levels**
 - DC input, 10 to 18V in, 3A minimum at 6.5 VDC
 - 11 W idle, default configuration
 - Extra power passed through for USB power, active antenna power, and DC output power
 - USB-A: 5V, 500 mA output; supports keyboards, thumb drives, A20-Mini transmitters, and USB hubs

Environmental

- **Operating Temperature Range**
 - -10 °C to +55 °C
- **Dimensions (H x W x D)**
 - 4.0 cm x 20.3 cm x 16.7 cm
 - (1.6 in x 8.0 in x 6.6 in)
- **Weight**
 - 1.27 kg (unpackaged)
 - 2.8 lbs (unpackaged)