REDNET 4  
  
The Network Audio Interface shall provide 8 remote controlled analogue input channels of connectivity to the Dante network, switchable between microphone level and line level. Inputs 1 and 2 may be also used as instrument level inputs. The Interface shall include remotely switchable analogue high-pass filters on each channel, -6 dB@65 +/- 3 Hz, 12 dB/octave slope. The Interface shall have user-selectable sample rates of 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz and 192 kHz.  
  
Inputs set to microphone level shall be electronically balanced with remotely-adjustable gain range of 0 dB, 8 to 63 dB in 1 dB steps. Mic preamps shall have a maximum input level of +16 +/- 0.5 dBu min. gain for 0 dBFS, Rs=150 ohms and a minimum input level of -47 +/- 0.5 dBu max. gain for 0 dBFS, Rs=150. Mic preamp frequency response shall be 20 Hz-55 kHz +/- 0.1 dB (-3 dB @ 80 kHz, fs=192 kHz.). THD+N shall be < 0.0007%, Noise shall be EIN -128 dB, 60 dB gain. Signal-to-Noise ratio shall be 119 dB “A”-weighted. 48v Phantom Power shall be independently switchable per channel.   
  
Inputs set to line level shall be electronically balanced with remotely-adjustable gain range of 0 to 54 dB in 1 dB steps. Line level preamps shall have a maximum input level of +24 +/- 0.5 dBu min. gain for 0 dBFS, and a minimum input level of -30 +/- 0.5 dBu max. gain for 0 dBFS. Line level preamp frequency response shall be 20 Hz-20 kHz +/- 0.1 dB. THD+N shall be < 0.003% @ -1 dBFS, +23 dBu input, minimum gain, Signal-to-Noise ratio shall be 117 dB “A”-weighted.  
  
Inputs set to instrument level shall be electronically balanced with remotely-adjustable gain range of 0 to 54 dB in 1 dB steps. Instrument level preamps shall have a maximum input level of +10 +/- 0.5 dBu min. gain for 0 dBFS, and a minimum input level of -44 +/- 0.5 dBu max. gain for 0 dBFS. Instrument level preamp frequency response shall be 20 Hz - 20 kHz +/- 0.1 dB. THD+N shall be < 0.001% @ -1 dBFS, +9 dBu input, minimum gain, Signal-to-Noise ratio shall be 112 dB “A”-weighted.  
  
Inputs shall have internal 24-bit A/D converters. Converters shall provide user-selectable sample rates of 44.1kHz, 48kHz, 88.2kHz, 96,kHz, and 192kHz. Electronically balanced microphone inputs shall be provided on 8 female XLR-3 connectors. Electronically balanced line inputs shall be provided on a 25-way female Dsub connector, wired to the AES 59 standard and electronically unbalanced instrument inputs shall be provided on 2 ¼” jack inputs. Internal signals shall be fully balanced throughout. The system shall use JetPLL technology to minimize conversion jitter. LED front panel indicators shall display the status of Power and Network connections, Sync Lock status, Sample Rate, Input Source, and Signal Level. The Network Audio Interface shall be contained in a 2RU industrial package designed for fixed installation in engineered audio and communications systems. Dimensions shall be 482.6 x 247 x 89mm (19”W x 9.74”D x 3.5”H). It shall weigh 4.04 kg (8.91 lbs). Maximum power consumption shall be 30 VA.  
  
The Network Audio Interface shall utilize the Dante Protocol for transport of digital audio signals. The system shall be capable of transporting up to 512 bidirectional audio channels over a single, standard Gigabit (or higher) Ethernet link. Software shall be provided for the routing, controlling, and configuring the Network Audio Interface. Software shall provide remote control of reference level, selection of preferred master clock, and sample rate. Ethernet connectivity shall be through a rear panel 8p8c/RJ45 LAN port.  
  
Ethernet communications shall be utilized for software control and Interface configuration. Dante technology shall transport digital audio over fast Ethernet, allowing multiple units to share digital audio. The Network Audio Interface shall require connection to an external 100Base-T or 1 Gigabit Ethernet switch. All Dante and Ethernet connections shall be via Cat5e (or better) cable or fiber-optic. Software shall operate on a PC computer, with network card installed, running Windows 7, Windows 8, and Windows 10 or Mac computer, with network card installed, running 10.9.x, 10.10.x, 10.11.x and 10.12.x.  
  
The Network Audio Interface shall be CE marked, UL/C-UL listed, and shall incorporate AES48-2005 Grounding & EMC practices. The Digital Audio Platform shall be compliant with EU Directive 2002/95/EC, the RoHS directive.   
  
Warranty shall be 1 year.   
  
The Network Audio Interface shall be Focusrite RedNet 4.