REDNET MP8R  
  
The Network Audio Interface shall provide 8 remote controlled analogue input channels of connectivity to the Dante network. The Interface shall include remotely switchable analogue high-pass filters, -6 dB @ 65 +/- 3 Hz, 12 dB/octave slope, a switchable pad of -20 dB, switchable input impedance between 2.4 kΩ and 10 kΩ, along with switchable polarity on each channel.   
  
Microphone level Inputs shall be electronically balanced with remotely-adjustable gain range of 10 dB to 65 dB in 1 dB steps. Mic preamps shall have a maximum input level of +29 dBu +/- 0.5 min. gain with pad for 0 dBFS, Rs=150 Ω pad out, and a minimum input level of -46 dBu +/- 0.5 max. gain without pad for 0 dBFS, Rs=150 Ω, pad out. Mic preamp frequency response shall be 20 Hz - 40 kHz +/- 0.1 dB. THD+N shall be -98 dB (0.0012%) @ -1 dBFS, Noise shall be EIN -129 dB ‘A’-weighted and Signal-to-Noise ratio shall be 118 dB ‘A’-weighted. 48v Phantom Power shall be independently switchable per channel.   
  
The Interface shall provide a user-selectable gain compensation offset of 0 dB, -3 dB and -6 dB (default). The gain compensation will create a duplicate of the original signal in the digital domain allowing for gain changes to be made to the original analogue signal without affecting the gain compensated signal.  
  
The Network Audio Interface shall provide both redundant power and network connections, with the ability to have redundant and switched network modes to run a redundant connection or daisy-chain devices together.  
  
Inputs shall have internal 24-bit A/D converters. Converters shall provide user-selectable sample rates of 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz and 192kHz (-4% / -0.1% / +0.1% / +4.167%). Electronically balanced microphone inputs shall be provided on 8 female XLR-3 connectors. 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 and Signal Level. The Network Audio Interface shall be contained in a 1RU industrial package designed for fixed installation in engineered audio and communications systems. Dimensions shall be 482.6 x 394 x 44.5mm (19”W x 15.51”D x 1.752”H). It shall weigh 5.75 kg (12.68 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, which supports EtherCON connections.  
  
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 MP8R.